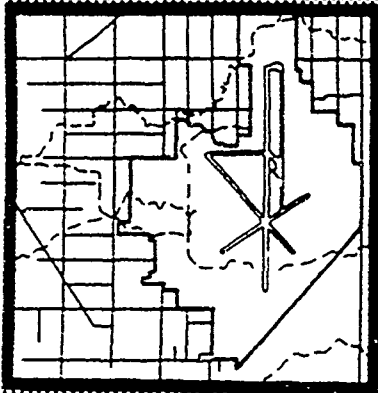


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**INSTALLATION RESTORATION PROGRAM (IRP)  
STAGE 3**

**McCLELLAN AIR FORCE BASE**

PREPARED BY:  
Radian Corporation  
10395 Old Placerville Road  
Sacramento, California 95827

**AUGUST 1990**

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AUG 29 1990  
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**DATA SUMMARY  
JANUARY - MARCH 1990**

**FINAL**

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PREPARED FOR:  
McCLELLAN AFB/EM  
McCLELLAN AFB, CALIFORNIA 95652-5990

United States Air Force  
Human Systems Division (AFSC)  
IRP Program Office (HSD/YAQC)  
Brooks Air Force Base, Texas 78235-5000

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SUBJECT Data Summary, Jan - Mar 90

• See Distribution List

1. Attached is the Data Summary Report for the period of Jan - Mar 90 (Atch 1).

2. As outlined in the Data Summary, groundwater was collected and analyzed from 107 monitoring wells, six Area B extraction wells, and four Area C extraction wells. Analytical results for this reporting period were similar to results obtained during the previous sampling period (Oct - Dec 89). Thirty-nine (39) monitoring wells and ten extraction wells had concentrations of analytes exceeding drinking water standards this quarter.

3. If there are any questions regarding this data summary, please contact Mr Dale Dietzel, S4-ALC/EMR, (916) 643-1250.

8/633

- Dale out until Tues, 4 Sept 90

*Keith G. Findley*  
KEITH G. FINDLEY, Colonel, USAF  
Director, Environmental Management

1 Atch  
Data Summary

*Henry Robbins* may call  
- called 8/25/90 at 12:40



COMBAT STRENGTH THROUGH LOGISTICS



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10395 Old Placerville Road  
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INSTALLATION RESTORATION PROGRAM (IRP)  
STAGE 3

GROUNDWATER SAMPLING AND ANALYSIS PROGRAM  
JANUARY THROUGH MARCH 1990  
DATA SUMMARY

FINAL

FOR

McCLELLAN AFB/EM  
McCLELLAN AFB, CALIFORNIA 95652-5990

AUGUST 1990

PREPARED BY:

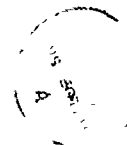
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CONTRACTOR CONTRACT NO. 227-005, DELIVERY ORDER NO. 0003

HSD/YAQC  
Mr. Patrick Haas  
TECHNICAL PROJECT MANAGER (TPM)

HUMAN SYSTEMS DIVISION (AFSC)  
IRP PROGRAM OFFICE (HSD/YAQI)  
BROOKS AIR FORCE BASE, TEXAS 78235-5000



## NOTICE

This Data Summary has been prepared for the Air Force for the purpose of aiding in the implementation of a final remedial action plan under the Air Force Installation Restoration Program (IRP). As the Data Summary relates to actual or possible releases of potentially hazardous substances, its release prior to an Air Force final decision on remedial action is in the public interest. The limited objectives of this Data Summary, the ongoing nature of the IRP, and the evolving knowledge of site conditions and chemical effects on the environment and human health, all must be considered when evaluating this Data Summary since subsequent facts may become known which may make this Data Summary premature or inaccurate. Acceptance of this Data Summary in performance of the contract under which it was prepared does not mean that the Air Force adopts the conclusions, recommendations, or other views expressed herein, which are those of the contractor only and do not necessarily reflect the official position of the Air Force.



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<p>✓</p> <p>This Data Summary presents the results of groundwater sampling activities conducted on and in the vicinity of McClellan Air Force Base from the sampling period of January through March 1990. Concentrations of purgeable halocarbons and aromatic compounds detected in 49 wells (39 monitoring wells and 10 extraction wells) exceeded state and/or federal drinking water standards. These wells are located on-base in Areas A, B, C, D and adjacent on-base areas and off-base in the Northwest and Southwest areas. The Area D extraction system is effectively operating to change hydraulic gradients, so groundwater in Area D flows toward the extraction wells. Samples from two middle zone monitoring wells located in Area D also show decreases in contaminant concentration during this sampling period. Decreasing contaminant concentrations have stabilized in shallow zone monitoring wells located off-base, west of Area D. <i>R. J.</i></p>			
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PREFACE

Radian Corporation is the contractor for the Installation Restoration Program (IRP), Stage 3 Remedial Investigation/Feasibility Study (RI/FS) at McClellan Air Force Base (AFB), California. The work is being performed for the Human Systems Division (AFSC), Installation Restoration Program Office (HSD/YAQC) under Air Force Contract No. F33615-87-D-4023, Delivery Order 0003.

This Data Summary summarizes and presents the results of the Ground-water Sampling and Analysis Program for the period of January through March 1990. The data presented include analytical results for groundwater samples collected from monitoring and extraction wells, and groundwater-level data measured from wells on and in the vicinity of McClellan AFB. These data are used to evaluate current interim remedial measures and to identify the need for future remedial measures.

Key Radian project personnel were:

Nelson Lund, P.E.--Contract Program Manager  
Jack D. Gouge--Delivery Order Manager  
William C. Knight--Project Manager  
Kirk Henning--Project Director

Radian acknowledges the cooperation of the McClellan AFB Office of Environmental Management. In particular, Radian acknowledges the assistance of Mr. Mario Ierardi, Mr. Bud Hoda, Mr. Dale Dietzel, and Mr. Patrick Haas/Capt. H. Thompson.

The work presented herein was accomplished between 08 January 1990 and 30 March 90. Mr. Patrick Haas/Capt. H. Thompson, Human Systems Division (AFSC), Installation Restoration Program Office (HSD/YAQC) was the Technical Project Manager.

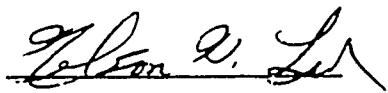
Approved:   
Nelson H. Lund, P.E.  
Contract Program Manager

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## EXECUTIVE SUMMARY

In support of ongoing Remedial Investigation/Feasibility Study (RI/FS) activities at McClellan Air Force Base (AFB), California, Radian personnel measure groundwater levels, and collect and analyze groundwater samples from selected on- and off-base wells on a quarterly basis. These activities identify the direction of groundwater flow and identify the presence of groundwater contaminants. This Data Summary presents the sampling and analytical results for data collected during the sampling period of January through March 1990. Evaluations of trends in groundwater flow and changing levels of contaminant concentrations, which may be developing with respect to time, will be presented in a subsequent technical report.

Groundwater levels were measured in 157 wells, and the data was used to generate water-level maps. Groundwater flow patterns at McClellan AFB were identified as follows:

- Area A - toward the southwest
- Area B - toward the south when base production well 18 is not operating
- Area C - radially toward the extraction wells, but overall groundwater flow direction is toward the south.
- Area D - radially toward the extraction system.

Groundwater was collected and analyzed from 103 monitoring wells, 6 Area D extraction wells, and 4 Area C extraction wells. Four extraction wells were also sampled during February and March 1990. Groundwater samples were analyzed by SW-846 methods for volatile organics (Methods 8010, 8020, and 8240), metals (Method 6010), and hexavalent chromium (Method 7196).

Analytical results for the January through March 1990 period of groundwater sampling and analyses are similar to results obtained during the previous sampling period (October through December, 1989). During the January through March sampling period, samples from 49 wells contained concentrations of analytes that exceeded drinking water standards. During the previous sampling period, 45 wells contained concentrations of analytes that exceeded drinking water standards.

The results from each well that was sampled and analyzed during the First Quarter 1990 were evaluated to determine if the recent sampling history of the well indicates any increasing or decreasing patterns in concentrations. The results of the evaluation are summarized in Table S-1.

The analytical results for all samples were evaluated on the basis of Quality Assurance/Quality Control (QA/QC) criteria specified in the McClellan AFB Quality Assurance Project Plan (QAPP) (August 1989). This evaluation ensures all analytical results meet the applicable acceptance criteria, and the reported data have acceptable quality. Data acceptability was determined by evaluating field and laboratory blanks, field duplicates, matrix spikes, matrix spike duplicates, analytical spikes, and surrogate spikes. The objectives for accuracy, precision, and completeness for the data were met, and overall analytical and sampling performance was acceptable. No overall adverse qualification or rejection of the data was necessary. Any data outside stated objectives were qualified. The completeness objective of having more than 90 percent usable data was met. Greater than 98 percent of the data were validated and met the data quality objectives of the program.

The Area D extraction system was evaluated based on hydraulic gradients between monitoring wells and the changes of contaminant concentrations detected in groundwater samples collected from shallow, middle, and deep "A" zone monitoring wells. The Area D extraction system is effective in containing contaminants because hydraulic gradients between specific pairs of monitoring wells remain at the recommended magnitudes. In addition, water-quality data from shallow zone monitoring wells outside of the well field indicate that TCE concentrations have decreased to below the MCL or have stabilized since the extraction system began operating in July 1987.

The Area C extraction system was designed as an interim remedial measure to remove contaminated groundwater near the contaminant source. At the present time, the influence of the Area C extraction system cannot be evaluated using the existing array of monitoring wells. More well pairs or piezometers are needed to measure the effects of the extraction wells on the hydraulic gradients and on local groundwater flow patterns. The extraction system has been operating for 19 months (August 1988 to March 1990), which is not a sufficient length of time to cause notable changes in contaminant concentrations. Trichloroethene concentration trends at monitoring wells located upgradient and downgradient of the extraction wells will continue to be evaluated to determine if contaminants migrating toward the extraction wells are being captured.

**TABLE S-1. NOTABLE CHANGES FROM PREVIOUS SAMPLING EVENT**  
 January - March 1990

Well ID	Last Quarter Sampled	Analyte	Concentration Change (µg/L)
<b>Area A</b>			
MW-71	4Q89	Trichloroethene	↑ from 0.59 (1Q89) to 3.5
<b>Area B</b>			
MW-7	4Q89	Trichloroethene	↑ from 36 to 47
		total 1,2-Dichloroethene	↑ from 24 to 34
MW-41S	4Q89	Tetrachloroethene	↓ from 200 to 130
		Trichloroethene	↓ from 3500 to 1800
MW-151	4Q89	Tetrachloroethene	↑ from ND to 6.1 (1)
MW-153	4Q89	Trichloroethene	↑ from 52 to 150
MW-156	----	Trichloroethene	↑ from 78 to 100 (2)
		total 1,2-Dichloroethene	↑ from 48 to 52 (2)
MW-157	----	Tetrachloroethene	↑ from 390 to 2300 (2)
		Trichloroethene	↑ from 4800 to 5400 (2)
MW-158	----	Trichloroethene	↑ from 1000 to 1500
		total 1,2-Dichloroethene	↑ from 28 to 42
		Tetrachloroethene	↑ from 80 to 210
<b>Southwest</b>			
MW-1046	4Q89	1,2-Dichloroethane	↑ detected at 0.60 (MCL = 0.50 µg/L)
MW-1049	4Q89	Trichloroethene	↑ from 8.5 to 13
<b>Area C</b>			
MW-129	4Q89	Trichloroethene	↑ from 140 to 290
MW-131	4Q89	Trichloroethene	↑ from 27 (3Q89) to 49
MW-136	4Q89	Trichloroethene	↑ from 170 to 690
<b>Area D</b>			
MW-10	4Q89	1,2-Dichloroethane	↓ from 7000 to 250
		Aluminum	4.3 mg/L (3)
MW-11	4Q89	Trichloroethene	↑ from 3200 to 3900
		1,1,1-Trichloroethane	↑ from 3400 to 3700
		1,1-Dichloroethene	↓ from 20,000 to 17,000
MW-72	4Q89	1,1-Dichloroethene	↓ from 530 to 260

ND = Not detected

(1) = Previously detected at 9.9 µg/L (3Q89)

(2) = Sampled under PGOURI or EE/CA prior to 1Q90

(3) = Not previously analyzed for this metal

A complete evaluation of the Groundwater Sampling and Analysis Program (GSAP) was performed in December 1989 and reported in the "Letter of Recommendations for the Continuance of the Groundwater Sampling and Analysis Program" (Radian, 1990). The report provides the rationale for proposed revisions to the program, including changes in sampling frequencies, analytical methods, and sampling schedules. The recommendations will become effective to the GSAP in the second quarter (April - June 1990) sampling effort.

Three new wells in the southwest area, MW-1054, MW-1055, and MW-1057, could not be sampled during the First Quarter 1990 sampling period due to muddy conditions at the site. Two attempts were made to sample these wells. These three wells are scheduled for sampling during Second Quarter 1990. Radian recommends that alternatives be explored to access these wells during the wet season.

## 1.0 GROUNDWATER SAMPLING AND ANALYSIS PROGRAM

The purposes of the field sampling activities are to obtain groundwater-level measurements and to obtain representative groundwater samples for chemical analyses. Groundwater-level measurements were taken in 157 wells on 08, 09, and 10 January 1990. These measurements provide data for evaluation of the groundwater flow directions beneath McClellan Air Force Base (AFB) and adjacent areas. Groundwater samples were collected from a total of 113 wells between 12 January and 02 March 1990. Locations of wells on and off base are shown on Plate 1, in the Plates Section of this report. The wells sampled included 103 monitoring wells, 6 Area D extraction wells, and 4 Area C extraction wells. Four extraction wells were also sampled during February and March 1990. Of the 113 monitoring wells sampled, 83 are located on base and 30 are located off base. Five wells were newly installed under the EE/CA Program and were sampled for the first time under the Groundwater Sampling and Analysis Program.

Beginning in January 1989, the sampling frequency for 42 monitoring wells was reduced from quarterly to annually. A reduction in sampling frequency was recommended by Radian Corporation (Radian) and approved by all concerned regulatory agencies. The reduction in sampling frequency for the 42 monitoring wells was based on the analytical history of the wells, location of the wells, and estimated groundwater velocities near the wells. The 42 wells included in the annual sampling schedule had shown a consistent history of either no analytes detected or relatively stable concentrations of analytes. Each of the wells reduced to annual sampling are located more than 1,000 feet from active water supply wells and from the two on-base extraction systems. Groundwater velocities in areas near the wells are estimated to range from 10 to 20 feet/month, a relatively slow velocity calculated from existing data on gradients and hydraulic conductivities. Because of their locations and relatively slow groundwater velocities, annual sampling of these wells is an adequate frequency to monitor data on groundwater quality. The wells now scheduled for annual sampling and the specific reasons for reducing sampling of each of these wells from quarterly to annually are listed in Appendix A-1. Wells scheduled for annual sampling were sampled during Fourth Quarter 1989.

During the January through March 1990 sampling period, Radian was unable to collect groundwater samples from eight wells that were selected for First Quarter sampling as follows:

- MW-114, MW-1013, and MW-1014: For the third consecutive quarter, the groundwater in these wells was very muddy, and there was very little water; a representative sample could not be taken.
- MW-120: This well has a bent casing, and sampling equipment could not be lowered to the water surface. This well was dry during Fourth Quarter 1989.
- MW-122: This well has a bent casing and a malfunctioning dedicated pump system. The bent casing prevents sampling equipment from being lowered into the well.
- MW-1054, MW-1055, and MW-1057: These wells were inaccessible due to muddy conditions at the well location. Another attempt to sample these wells was made two weeks after the end of the first quarter sampling effort. However, the wells were still inaccessible. These three wells are scheduled for sampling during Second Quarter 1990.

All groundwater samples collected were analyzed using U.S. Environmental Protection Agency (U.S. EPA) Solid Waste 846 (SW-846) Methods (U.S. EPA Third Edition, 1986). All samples were analyzed for halogenated volatile organic compounds (VOCs) using U.S. EPA Method 8010. Selected samples were analyzed for: aromatic VOCs using U.S. EPA Method 8020; VOCs using U.S. EPA Method 8240, metals using U.S. EPA Method 6010; and hexavalent chromium using U.S. EPA Method 7196.

A list of wells sampled and analyses performed during January through March 1990 is presented in Table 1-1 on page 1-20. Locations of the wells are shown on Plate 1. MW-61 was inadvertently analyzed for U.S. EPA Method 6010 only; no analysis for volatile organic compounds was performed for this well during the First Quarter 1990.

A summary of the analytical results from the sampling period of January through March 1990 is presented in Tables 1-2 and 1-3. Contaminant levels in 49 wells exceeded California Department of Health Services (DHS) Maximum Contaminant Levels (MCLs), DHS Action Levels, and/or U.S. EPA Primary Maximum Contaminant Levels. Of the 49 wells, 31 are on-base monitoring wells located in Areas A, B, C, and D; 10 are extraction wells located in Areas C and D; and 8 are off-base monitoring wells located in the Northwest and Southwest Areas. During the previous sampling

TABLE 1-2. SUMMARY OF RESULTS FOR METHOD 8010,  
GROUNDWATER SAMPLING AND ANALYSIS PROGRAM,  
JANUARY THROUGH MARCH 1990, MCCLELLAN AIR FORCE BASE

ON-BASE MONITORING AND EXTRACTION WELLS				
Total Wells Sampled	Wells - Nothing Detected	Wells Containing Analytes Below Maximum Contaminant Level Or Action Level	Wells Containing Analytes Exceeding Or Equal To Maximum Contaminant Level Or Action Level	
Area A and Adjacent On-Base Areas	3	0	2	MW-26D
Area B and Adjacent On-Base Areas	23	5	7	MW-7, MW-41S, MW-63, MW-65, MW-132, MW-148, MW-151, MW-153, MW-156, MW-157, MW-158
Area C and Adjacent On-Base Areas	25	5	7	EW-137, EW-140, EW-141, EW-144, MW-33S, MW-44S, MW-75, MW-128, MW-129, MW-131, MW-135, MW-136, MW-139
Area D and Adjacent On-Base Areas	29	6	7	EW-73, EW-83, EW-84, EW-85, EW-86, EW-87, MW-10, MW-11, MW-12, MW-14, MW-15, MW-55, MW-57, MW-72, MW-89, MW-91
Other On-Base Areas	1	1	0	
Totals:	81	17	23	41

EW = Extraction Well MW = Monitoring Well



TABLE 1-2 (Continued.)

OFF-BASE MONITORING WELLS

	Total Wells Sampled	Wells - Nothing Detected	Wells Containing Analytes		Wells Containing Analytes Exceeding Or Equal To Maximum Contaminant Level Or Action Level
			Below Maximum Contaminant Level Or Action Level	Exceeding Or Equal To Maximum Contaminant Level Or Action Level	
NORTHWEST Area	8	2	3		MW-74, MW-1004, MW-1005
SOUTHEAST Area	4	3	1		
SOUTHWEST Area	19	5	9		MW-1021, MW-1022, MW-1045, MW-1046, MW-1049
Totals:	31	10	13		8

EW = Extraction Well MW = Monitoring Well

TABLE 1-3. SUMMARY OF RESULTS FOR OTHER ANALYSES,  
GROUNDWATER SAMPLING AND ANALYSIS PROGRAM,  
JANUARY THROUGH MARCH 1990, MCCLELLAN AIR FORCE BASE

Method	ON- AND OFF-BASE MONITORING AND EXTRACTION WELLS				Wells Containing Analytes Exceeding Or Equal To Maximum Contaminant Level Or Action Level
	Total Wells Sampled	Wells - Nothing Detected	Wells Containing Analytes Below Maximum Contaminant Level Or Action Level		
8020, Volatile Aromatic Compounds	21	20	1		
8240, Purgeable Organic Compounds	8	0	2		EW-73, EW-83, EW-84, EW-85, EW-86, EW-87
6010, Priority Pollutant Metals and Other Inorganic Compounds	44	0	43		MW-10
7196, Chromium VI	18	18	0		

MW = Monitoring Wells EW = Extraction Wells

period, 45 wells contained contaminants at concentrations above DHS Action Levels and/or U.S. EPA PMCLs. The reason for the increase in the number of wells exceeding drinking water standards will be discussed in Section 1.2.

### **1.1 Results of Field Activities**

Field activities included measuring groundwater levels, monitoring three water quality parameters during purging of the wells, and collecting water quality samples for chemical analyses. The detailed procedures used to measure groundwater-levels and to collect water samples are described in the Quality Assurance Project Plan (QAPP) (Radian, August 1989). Sampling procedures include purging a minimum of three well volumes from each well and the measurement of pH, temperature, and conductivity of groundwater to verify that stagnant water in the well has been removed and fresh formation water will be sampled. When the pH, temperature, and conductivity have stabilized after repeated measurements of purged water, the well is considered ready for sampling.

The results of field data collected during January through March 1990 are discussed in the following subsections.

#### **1.1.1 Groundwater Levels**

The results of groundwater-level measurements for January 1990 are presented in Table 1-4 beginning on page 1-24. These water-level data were used to generate potentiometric surface maps for the four zones monitored quarterly at McClellan AFB. The four monitoring zones are as follows: the shallow monitoring zone (above -55 feet mean sea level [msl]); middle monitoring zone (between -55 and -100 feet msl); deep "A" monitoring zone (between -100 and -150 feet msl); and deep "B" monitoring zone (below -150 feet msl). One potentiometric surface map is constructed from water-level measurements representing each zone. Potentiometric surface maps at a larger scale are prepared for two zones beneath Area D. The maps are presented on Plates 2 through 7.

An evaluation of the potentiometric maps for the four monitoring zones (Plates 2 through 7) indicates that the flow patterns across the base are similar to those from previous quarters except in Area B. In Area B, groundwater flow is greatly influenced by the pumping of Base Production Well (BW) 18. When the well is pumping, groundwater in all four monitoring zones flows toward the cone of depression

created by BW-18. However, during early January 1990 BW-18 was not pumping, thus the groundwater flow direction in all four monitoring zones within Area B was not toward the well but instead toward the south. Water levels measured during January in wells near BW-18 are from four to eight feet higher than in October 1989. In other portions of the base, groundwater flow directions have not changed since the last quarter. In Area D, the effect of extraction well pumping can be seen as cones of depression on the maps for the shallow and middle monitoring zones. The shallow, middle, and deep "A" maps show groundwater flow toward the south/southeast from the West Area, across Area C to Area B. The shallow and middle zone maps for the southeastern part of McClellan AFB and Area A continue to show flow toward the southwest.

### **1.1.2 Field Parameters**

Results of pH, conductivity, and temperature measurements taken during the January through March 1990 sampling period are presented in Table 1-5 beginning on page 1-29.

## **1.2 Analytical Results**

Samples collected from monitoring and extraction wells during this sampling period were analyzed using U.S. EPA Methods 8010, 8020, 8240, 6010, and 7196. Samples collected from 49 wells contained contaminants at concentrations above DHS Action Levels, DHS MCLs, and/or U.S. EPA PMCLs. Analytical results from these 49 wells are listed in Table 1-6 on page 1-32. Three new wells, MW-156, MW-157, and MW-158, were added to the GSAP this quarter. During the Fourth Quarter 1989 sampling period, samples from 45 wells contained concentrations above state and federal drinking water standards. Some of the 49 wells listed in Table 1-6 are different than those that were above drinking water standards during the last sampling period (October 1989). These differences are summarized below:

- Concentrations in one well, MW-131, were detected above drinking water standards during this sampling period. This well was above drinking water standards when last sampled during Second Quarter 1990.
- Concentrations in one well, MW-150, decreased below drinking water standards during this sampling period.

- Concentrations in three new wells, MW-156, MW-157, and MW-158, that had not been previously sampled under this program had concentrations above drinking water standards.

Trichloroethene (TCE) was the contaminant that exceeded the DHS MCLs concentration in 43 of the 49 wells containing contaminants above state and federal drinking water standards. Concentrations of TCE detected in wells sampled during this sampling period are shown by monitoring zone on Plates 8, 9, 10, and 11 representing the shallow, middle, deep "A," and deep "B" monitoring zones, respectively.

The results from each well sampled and analyzed during the First Quarter 1990 were evaluated to determine if the recent sampling history of the well indicates any apparent trend of increasing or decreasing contaminant concentrations. The results were also evaluated to determine if there was a wide variation in concentrations from those detected during the Fourth Quarter 1989. The results of this evaluation are summarized below.

In Area A, the concentration of trichloroethene (TCE) in MW-71 has shown a pattern of increasing concentration over the last four quarters. The TCE concentration in MW-71 increased from 0.59  $\mu\text{g/L}$  in the First Quarter 1989 to 3.5  $\mu\text{g/L}$  in the First Quarter 1990. The MCL for TCE is 5.0  $\mu\text{g/L}$ .

Four wells in Area B, including MW-7, MW-41S, MW-151, and MW-153 showed notable changes in the First Quarter 1990.

- |          |                          |  |
|----------|--------------------------|--|
| • MW-7   | Trichloroethene          | ↑ from 36 to 47 $\mu\text{g/L}$  |
|          | Total 1,2-Dichloroethene | ↑ from 24 to 34 $\mu\text{g/L}$  |
| • MW-41S | Tetrachloroethene        | ↓ from 200 to 130 $\mu\text{g/L}$  |
|          | Trichloroethene          | ↓ from 3500 to 1800 $\mu\text{g/L}$  |
| • MW-151 | Tetrachloroethene        | ↑ from below MCL of 5 $\mu\text{g/L}$ to 6.1 $\mu\text{g/L}$ .<br>Previously detected at 9.9 $\mu\text{g/L}$ (3Q89). |
| • MW-153 | Trichloroethene          | ↑ from 52 to 150 $\mu\text{g/L}$   |

Three wells, previously sampled under ABGOURI and EE/CA, had compounds detected above drinking water standards.

- MW-156 Trichloroethene † from 78 (9/89) to 100  $\mu\text{g/L}$   
total 1,2-Dichloroethene † from 48 to 52  $\mu\text{g/L}$
- MW-157 Trichloroethene † from 4800 to 5400  $\mu\text{g/L}$   
Tetrachloroethene † from 390 to 2300  $\mu\text{g/L}$
- MW-158 Trichloroethene † from 1000 to 1500  $\mu\text{g/L}$   
Tetrachloroethene † from 80 to 210  $\mu\text{g/L}$   
total 1,2-Dichloroethene † from 28 to 42  $\mu\text{g/L}$

In the Southwest Area, MW-1046 had 1,2-dichloroethane detected at 0.60  $\mu\text{g/L}$ , above the DHS MCL of 0.50  $\mu\text{g/L}$ . Trichloroethene (TCE) in this well remained at 20  $\mu\text{g/L}$ . Additionally, TCE in MW-1049 increased from 8.5 to 13  $\mu\text{g/L}$ .

Three wells in Area C including MW-129, MW-136, and MW-131, showed changes in the First Quarter 1990. Variations in analyte concentrations are expected in wells near the Area C extraction system, such as MW-129 and MW-136.

- MW-129 Trichloroethene † from 140 to 290  $\mu\text{g/L}$
- MW-131 Trichloroethene † from 27 (3Q89) to 49  $\mu\text{g/L}$
- MW-136 Trichloroethene † from 170 to 690  $\mu\text{g/L}$

Three wells in Area D, MW-10, MW-11, and MW-72, had notable changes in the First Quarter 1990.

- MW-10 1,2-Dichloroethane † from 7000 to 250  $\mu\text{g/L}$   
(250  $\mu\text{g/L}$  is the historical range)  
Aluminum detected at 4.3 mg/L (MCL is 1.0 mg/L; not previously analyzed for this metal)
- MW-11 Trichloroethene † from 3200 to 3900  $\mu\text{g/L}$

1,1,1-Trichloroethene	↑ from 3400 to 3700 µg/L
1,2-Dichloroethene	↓ from 20,000 to 17,000 µg/L
• MW-72 1,1-Dichloroethene	↓ from 530 to 260 µg/L (260 is the historical range)

### 1.2.1 Summary of QA/QC Data

This section presents a summary of the Quality Assurance/Quality Control (QA/QC) data, qualified data, and corrective actions taken during January, February, and March 1990.

The QA/QC data presented in this report have been evaluated with respect to the quality assurance objectives specified in Section 4.0 of the Final McClellan Air Force Base Quality Assurance Project Plan (QAPP) (Radian, August 1989). These objectives specify acceptable accuracy and precision performance for each method. In addition, objectives are specified for completeness, representativeness, and comparability.

The quality assurance objectives for precision are: a relative percent difference (RPD) of less than or equal to 50 percent for field duplicate sample results, and an RPD of less than or equal to 30 percent for laboratory duplicate results. The objectives for accuracy are analyte-specific and are listed in each method standard operating procedure. The objective for completeness is to have greater than 90 percent of all data reported as valid. The objective for comparability and representativeness are more a function of the sampling program and can be evaluated only in terms of the program objectives. However, comparability is achieved by using standard methods of sampling and analysis, reporting in standard units, and using standard and comprehensive reporting formats.

There were no significant problems that affected the overall data quality reported for the period of January, February, and March 1990, as shown in the summary of QA/QC procedures presented in this report. Although data from several wells required qualification, the majority of the data met the data quality objectives. Summaries of the QC data for blanks, and for duplicates and spikes are presented in Tables 1-7 and 1-8, beginning on pages 1-12 and 1-14, respectively. Table 1-9, beginning

on page 1-16, contains a list of the qualified data. Table 1-10, beginning on page 1-39 shows the holding times for each sample.

More than 98 percent of the data were valid, fulfilling the project objectives for accuracy and precision; the exceptions are noted in Table 1-9. From a total of 6284 individual analyte-measurement results (both detected and nondetected), 76 detected results were qualified. The completeness objective of 90 percent valid data was attained.

Some analytical results in this report are flagged with letters or symbols. A "C" flag indicates that the analyte was confirmed by analysis on a second chromatographic column. A "P" flag indicates that the compound had been confirmed in previous quarters by a second-column confirmation run; therefore, a second-column confirmation was not performed. A "B" flag indicates that the compound was reported in the reagent blank analyzed the day the sample was analyzed. A "U" flag appears when either methylene chloride or toluene were detected at a concentration less than five times the detection limit. No confirmation is required for these two analytes at these low concentrations and the data are flagged as unconfirmed.

There were wells in which the quantitation of certain compounds were affected by interferences on the first column for analyses by Method 8010. Because the deviation concentrations were not within a factor of two, the compounds for both the first and second column were reported as unconfirmed. As indicated by past history, these compounds have already been previously confirmed. This data is being reported and flagged with one of three letters [(a), (b), or (c)] to describe the analytical consideration that causes qualification of the result, as well as the flag, (2), which indicates that the second column result was reported. All Method 8010 data with these flags should be interpreted as an estimated or approximate value.

A subset of Method 8010 analytical data initially were reported with a high bias in the results for compounds of interest due to a laboratory calibration error. One of 5 calibration standards did not meet the laboratory acceptance criterion, and use of the resulting linear regression equation introduced a high bias (11 to 39 percent) in the data for all except 1 of 28 method analytes detected in this sampling period. The EPA method requires either use of a 5 point calibration to within a relative standard difference of 20%, or the use of a calibration curve. The linear regression equation used to calculate the sample results meet Radian's quality assurance objectives if the



TABLE 1-7. SUMMARY OF QUALITY CONTROL RESULTS FOR BLANKS, GROUNDWATER  
 SAMPLING AND ANALYSIS PROGRAM, JANUARY - MARCH 1990,  
 McCLELLAN AFB

U.S. EPA SW-846 Method	Number Performed	Compound (Number of Occurrences)	Range of Results
<u>Reagent Blanks</u>			
8010	43	ND	NA
8020	16	ND	NA
8240	4	Acetone (1) Methylene chloride (3)	1.6 * ug/L 1.6 - 5.3* ug/L
6010	15	Aluminum (3) Boron (7) Sodium (3) Molybdenum (3) Zinc (5) Iron (5) Calcium (4) Silicon (3)	0.065 * mg/L 0.012 - 0.016 * mg/L 0.75 * mg/L 0.009 - 0.010 * mg/L 0.003 - 0.004 mg/L 0.011 - 0.016 * mg/L 0.018 - 0.019 * mg/L 0.29 mg/L
7196	15	ND	NA
<u>Trip Blanks</u>			
8010	8	Methylene chloride (2) Tetrachloroethene (2)	0.60 - 0.86 * ug/L 0.25 - 0.31 * ug/L
<u>Ambient Blanks</u>			
8010	9	1,1,1-Trichloroethane (1) Methylene chloride (2) Trichloroethene (1)	0.35 * ug/L 0.58 - 0.66 * ug/L 0.60 C * ug/L
8020	1	No Analytes Detected	NA
<u>Equipment Blanks</u>			
8010	12	1,1,1-Trichloroethane (2) Methylene chloride (4) Trichloroethene (1)	0.28 - 0.65 * ug/L 0.84 - 3.1 * ug/L 0.32 * C ug/L

continued

Table 1-7. (Continued)

U.S. EPA SW-846 Method	Number Performed	Compound (Number of Occurrences)	Range of Results
8020	4	No Analytes Detected	NA
6010	1	Boron (1)	0.29 mg/L
		Calcium (1)	0.064 mg/L
		Iron (1)	0.067 mg/L
		Silicon (1)	0.30 mg/L
		Sodium (1)	0.43 mg/L
		Zinc (1)	0.0030 * mg/L
7196	1	No Analytes Detected	NA

NA = Not applicable.

C = Confirmed on second column.

\* = Detected at less than five times the detection limit.

TABLE 1-8. SUMMARY OF QUALITY CONTROL RESULTS FOR DUPLICATES  
 AND SPIKES, GROUNDWATER SAMPLING AND ANALYSIS PROGRAM,  
 JANUARY - MARCH 1990, McCLELLAN AFB

U.S. EPA SW-846 Method	Number Performed	Compound	Range of Results (%)	Acceptance Criteria <sup>a</sup> (%)	Results Not Meeting Criteria <sup>b</sup>
<b><u>Duplicate Samples</u></b>					
8010	11	Varies	0 - 86	50	2
8020	3	No Analytes Detected	NC	50	0
8240	1	Varies	6 - 17	50	0
6010	4	Varies	0 - 127	50	3
7196	2	Hexavalent chromium	NC	50	0
<b><u>Matrix Spike Duplicates</u></b>					
8010	10	3 compounds	1 - 53	30	2
8020	3	3 compounds	2 - 82	30	1
8240	1	5 compounds	6 - 97	30	0
6010	3	Varies	0 - 16	30	0
7196	1	Hexavalent chromium	12	30	0
<b><u>Matrix Spikes</u></b>					
8010	20	Chlorobenzene	75 - 101	38 - 150	0
	18	1,1-Dichloroethene	43 - 99	28 - 167	0
	18	Trichloroethene	49 - 102	35 - 146	0
8020	6	Benzene	50 - 120	39 - 150	0
	6	Toluene	63 - 85	46 - 148	0
	6	Chlorobenzene	57 - 73	55 - 135	0
8240	2	Benzene	85 - 90	76 - 127	0
	2	Toluene	88 - 97	76 - 125	0
	2	Chlorobenzene	86 - 94	75 - 130	0
	2	1,1-Dichloroethene	158 - 210	65 - 145	2
	2	Trichloroethene	97 - 113	71 - 120	0
6010	6	Varies	96 - 164	75 - 125	2
7196	2	Hexavalent chromium	87 - 98	75 - 125	0

continued

Table 1-8 (Continued)

U.S. EPA SW-846 Method	Number Performed	Compound	Range of Results (%)	Acceptance Criteria <sup>a</sup> (%)	Results Not Meeting Criteria <sup>b</sup>
<b><u>Analytical Spikes</u></b>					
6010	varies by metal analyte	Varies	62 - 118	75 - 125	12
<b><u>Surrogate Spikes</u></b>					
8010	196	1-Bromo-4-fluorobenzene	64 - 172	40 - 140	7
8020	196	1-Bromo-4-fluorobenzene	80 - 124	40 - 140	0
100	12	1,2-Dichloroethane-d <sub>4</sub>	86 - 100	76 - 114	0
		1-Bromo-4-fluorobenzene	95 - 104	86 - 115	0
		Toluene-d <sub>8</sub>	98 - 104	88 - 110	0

<sup>a</sup> The acceptance criteria represent the upper acceptable bound of the RPD (%) for duplicates and the range in percent recovery for the spikes.

<sup>b</sup> Refers to individual analytical results, not overall sample results.

NC = Not Calculated

TABLE 1-9. SUMMARY OF QUALIFIED DATA, GROUNDWATER SAMPLING AND ANALYSIS PROGRAM, JANUARY THROUGH MARCH 1990, McCLELLAN AFB

Sample Number	U.S. EPA Method	Analyte(s)	Type of Qualification	Reason
EW-73	8240	1,1-Dichloroethene	PL	High matrix spike recovery
	8010	1,1-Dichloroethene	M	High matrix spike recovery
EW-84	8240	Methylene Chloride	R	Detected in reagent blank
EW-85	8240	Methylene Chloride	R	Detected in reagent blank
	6010	Zinc	R	Detected in reagent blank
	8010	Tetrachloroethene	E	Estimated - poor confirmation
EW-86	8010	Tetrachloroethene	E	Estimated - poor confirmation
EW-137	6010	Zinc	R	Detected in reagent blank
EW-140	6010	Zinc	R	Detected in reagent blank
EW-141	6010	Zinc	R	Detected in reagent blank
EW-144	8010	1,1,1-Trichloroethane	E	Estimated - poor confirmation
	6010	Zinc	R	Detected in reagent blank
MW-7	8010	Methylene Chloride	E	Estimated - poor confirmation
MW-21D	6010	Zinc/Iron	R	Detected in reagent blank
MW-22	8010	Trichloroethene	E	Estimated - poor confirmation
MW-26D	8010	Chloroform	E	Estimated - poor confirmation
MW-33S	6010	Zinc/Iron	R	Detected in reagent blank
MW-44S	6010	Zinc/Iron	R	Detected in reagent blank
	8010	Trichloroethene	E	Estimated - poor confirmation
MW-54	6010	Iron	R	Detected in reagent blank
MW-57	8010	1,2-Dichloroethane	E	Estimated - poor confirmation

(Continued)

TABLE 1-9. (Continued)

Sample Number	U.S. EPA Method	Analyte(s)	Type of Qualification	Reason
MW-60	6010	Zinc/Iron	R	Detected in reagent blank
	8010	Trichloroethene	E	Estimated - poor confirmation
MW-62	6010	Iron	M, PF	High matrix spike recovery
MW-70	8010	Tetrachloroethene	E	Estimated - poor confirmation
MW-71	8010	Chloroform	E	Estimated - poor confirmation
MW-88	8010	Tetrachloroethene	E	Estimated - poor confirmation
MW-89	6010	Zinc/Iron	R	Detected in reagent blank
	8010	1,1-Dichloroethene	E	Estimated - poor confirmation
MW-92	6010	Zinc	PF	High RPD in duplicate sample
MW-104	6010	Zinc/Iron	R	Detected in reagent blank
	8010	Trichloroethane	E	Estimated - poor confirmation
MW-128	8020	Benzene	PL	High RPD in MS/MSD
	6010	Zinc/Iron	R	Detected in reagent blank
	8010	1,1,2,2-Tetrachloroethane	E	Estimated - poor confirmation
MW-135	8020	total-1,2-Dichloroethene	PF	High RPD in duplicate sample
	6010	Iron	PF	High RPD in duplicate sample
MW-136	6010	Zinc/Iron	R	Detected in reagent blank
MW-138	6010	Zinc/Iron	R	Detected in reagent blank
MW-142	6010	Zinc/Iron	R	Detected in reagent blank
MW-147	6010	Zinc/Iron	R	Detected in reagent blank
MW-150	8240	Methylene Chloride	R	Detected in reagent blank
MW-153	8010	Trichloroethene	PL	High RPD in MS/MSD
MW-155	8010	total-1,2-Dichloroethane	E	Estimated - poor confirmation

(continued)

TABLE 1-9. (Continued)

Sample Number	U.S. EPA Method	Analyte(s)	Type of Qualification	Reason
MW-157	8010	Tetrachloroethene	M	High surrogate recovery
MW-1000	8010	Methylene chloride	O	Detected in ambient blank
MW-1001	6010	Zinc/Iron	R	Detected in reagent blank
MW-1003	6010	Zinc/Iron	R	Detected in reagent blank
MW-1004	8010	Trichloroethene	PF	High RPD in duplicate sample
	8010	1,2-Dichloroethane	E	Estimated - poor confirmation
MW-1019	8010	Chloroform	E	Estimated - poor confirmation
MW-1021	8010	Trichloroethene	PL	High RPD in MS/MSD
MW-1022	8010	Tetrachloroethene	E	Estimated - poor confirmation
MW-1023	8010	1,1,1-Trichloroethane	E	Estimated - poor confirmation
MW-1039	8010	1,1,1-Trichloroethane	E	Estimated - poor confirmation
MW-1045	8240	Methylene chloride	R	Detected in reagent blank
	8010	Trichloroethene	E	Estimated - poor confirmation
MW-1046	8010	1,2-Dichloroethane	E	Estimated - poor confirmation
MW-1047	6010	Boron	O	Detected in equipment blank
		Iron	O	Detected in equipment blank
		Zinc	O	Detected in equipment blank
MW-1050	8010	Methylene chloride	E	Estimated - poor confirmation
	8010	Trichloroethene	E	Estimated - poor confirmation

PL = Qualified as estimated due to high laboratory variability as measured by laboratory matrix spikes/matrix spike duplicates.

PF = Qualified as estimated due to high total variability as measured by field duplicates.

RPD = Relative percent difference.

R = Detected in reagent blank.

O = Detected in blank other than reagent blank.

M = Qualified as inaccurate due to matrix spike or surrogate recoveries outside the control limits.

E = Qualified as estimated due to poor second column confirmation because of coelution, interference, or random error.

highest standard is removed. Therefore, the regression equations were recalculated using the remaining 4 standards. The corrected regression equations were used to recalculate all affected sample results. All corrected sample results calculated from the four-point calibration curve are reported with an "I" flag. Because the highest concentration standard has been removed from the calibration curve, the quantitation range for analyses performed on the affected instrument is reduced from 30 ppb to 15 ppb. In one sample, the field duplicate taken at MW-11, the results for 1,1-dichloroethene exceeded the calibration range of the instrument after recalculation. The result is flagged in data tables with a "G". This sample is considered a quality assurance sample, therefore it is not included in Table 1-9.

Method 8010 data from seven monitoring wells and nine extraction wells were affected. Seventy-five individual analytical results were recalculated and flagged. Nine analytes were affected, including trichloroethene and tetrachloroethene. The corrected sample results are considered valid, unqualified, and meet project objectives for usability for the following reasons:

- The calibration curve and linear regression equations meet method requirements;
- A review of historical data from these samples indicates that the recalculated data is within normal range for previous values; and
- Only data that was within the calibration range of the instrument has been reported without qualification.

### 1.2.2 Presentation of Analytical Data

This section presents the results of the chemical analyses for groundwater samples collected during January through March 1990. The analytical results are presented by area and by analytical method. Tables 1-11 through 1-12 present the results for Area A and Adjacent On-Base Areas. Table 1-13 presents the results for the Southeast Area. Tables 1-14 through 1-18 present the results for Area B and Adjacent On-Base Areas. Tables 1-19 through 1-22 present the results for the Southwest Area. Tables 1-23 through 1-26 present the analytical results from wells located in Area C and Adjacent On-Base Areas. The analytical results from Area D and from the Northwest Area are presented in Tables 1-27 through 1-31 and Tables 1-32 through 1-35, respectively. Tables 1-36 through 1-38 present the analytical results from Other On-Base Areas.



TABLE 1-1. WELLS SAMPLED AND ANALYSES PERFORMED,  
 GROUNDWATER SAMPLING AND ANALYSIS PROGRAM,  
 JANUARY THROUGH MARCH 1990, McCLELLAN AIR FORCE BASE

Well (a) Number	Date Sampled	8010	8020	Method 8240	6010	7196
EW-73	23-Jan-90			X		
EW-73	02-Feb-90	X	X			
EW-73	02-Mar-90	X	X			
EW-83	23-Jan-90			X		
EW-83	02-Feb-90	X				
EW-83	02-Mar-90	X				
EW-84	23-Jan-90			X		
EW-84	02-Feb-90	X				
EW-84	02-Mar-90	X				
EW-85	23-Jan-90			X	X	X
EW-85	02-Feb-90	X				
EW-85	02-Mar-90	X				
EW-86	23-Jan-90			X		
EW-86	02-Feb-90	X				
EW-87	23-Jan-90			X		
EW-87	02-Feb-90	X				
EW-87	02-Mar-90	X				
EW-137	23-Jan-90	X	X		X	
EW-137	02-Feb-90	X				
EW-137	02-Mar-90	X	X			
EW-140	23-Jan-90	X	X		X	
EW-140	02-Feb-90	X				
EW-140	02-Mar-90	X	X			
EW-141	23-Jan-90	X	X		X	
EW-141	02-Feb-90	X				
EW-141	02-Mar-90	X	X			
EW-144	23-Jan-90	X	X		X	
EW-144	02-Feb-90	X				
EW-144	02-Mar-90	X	X			
MW-7	07-Feb-90	X				
MW-10	21-Feb-90	X			X	X
MW-11	22-Feb-90	X				
MW-12	20-Feb-90	X				
MW-14	21-Feb-90	X				
MW-15	15-Feb-90	X				
MW-19D	28-Feb-90	X				
MW-20D	23-Jan-90	X			X	
MW-21D	31-Jan-90	X			X	
MW-22D	26-Jan-90	X			X	
MW-23D	16-Jan-90	X				

(Continued.)

(a) - The letters 'S' and 'D' associated with the monitoring well numbers are part of the well identification notation and do not refer to monitoring zones at McClellan AFB.

EW = Extraction Well

MW = Monitoring Well

TABLE 1-1 (Continued.)

Well (a) Number	Date Sampled	8010	8020	Method 8240	6010	7196
MW-24D	16-Jan-90	X			X	X
MW-25D	31-Jan-90	X				
MW-26D	31-Jan-90	X				
MW-28D	24-Jan-90	X				
MW-33S	29-Jan-90	X	X		X	
MW-41S	12-Jan-90	X				
MW-44S	30-Jan-90	X			X	
MW-51	12-Jan-90	X				
MW-52	23-Jan-90	X				
MW-53	18-Jan-90	X				
MW-54	24-Jan-90	X			X	X
MW-55	15-Jan-90	X				
MW-57	25-Jan-90	X				
MW-58	22-Jan-90	X				
MW-59	24-Jan-90	X				
MW-60	30-Jan-90	X			X	
MW-61	23-Jan-90				X	
MW-62	23-Jan-90	X	X		X	X
MW-63	16-Jan-90	X				
MW-64	13-Feb-90	X				
MW-65	28-Feb-90	X				
MW-66	19-Feb-90	X	X		X	
MW-70	25-Jan-90	X			X	X
MW-71	02-Feb-90	X	X			
MW-72	20-Feb-90	X				
MW-74	27-Feb-90	X	X			
MW-75	05-Feb-90	X			X	
MW-76	28-Feb-90	X	X			
MW-88	25-Jan-90	X				
MW-89	29-Jan-90	X			X	X
MW-90	20-Feb-90	X				
MW-91	17-Jan-90	X				
MW-92	17-Jan-90	X			X	X
MW-104	30-Jan-90	X			X	X
MW-105	12-Jan-90	X				
MW-115	18-Jan-90	X				
MW-121	15-Jan-90	X				
MW-128	30-Jan-90	X	X		X	
MW-129	19-Jan-90	X			X	
MW-130	19-Jan-90	X			X	
MW-131	26-Jan-90	X			X	
MW-132	17-Jan-90	X				

(Continued.)

(a) - The letters 'S' and 'D' associated with the monitoring well numbers are part of the well identification notation and do not refer to monitoring zones at McClellan AFB.

EW = Extraction Well

MW = Monitoring Well

TABLE 1-1. (Continued.)

Well (a) Number	Date Sampled	8010	8020	Method 240	6010	7196
MW-133	22-Jan-90	X			X	
MW-134	15-Jan-90	X			X	
MW-135	22-Jan-90	X			X	
MW-136	30-Jan-90	X			X	
MW-138	29-Jan-90	X			X	
MW-139	26-Jan-90	X			X	
MW-142	29-Jan-90	X			X	
MW-143	16-Jan-90	X			X	
MW-145	25-Jan-90	X	X			
MW-146	06-Feb-90	X	X			
MW-147	06-Feb-90	X	X		X	X
MW-148	07-Feb-90	X	X			
MW-149	07-Feb-90	X	X			
MW-150	22-Feb-90	X		X		
MW-151	08-Feb-90	X	X			
MW-152	08-Feb-90	X	X			
MW-153	21-Feb-90	X	X			
MW-154	08-Feb-90	X	X			
MW-155	07-Feb-90	X				
MW-156	26-Feb-90	X				
MW-157	19-Feb-90	X				
MW-158	13-Feb-90	X				
MW-1000	19-Feb-90	X				
MW-1001	31-Jan-90	X			X	X
MW-1002	17-Jan-90	X				
MW-1003	31-Jan-90	X			X	X
MW-1004	31-Jan-90	X				
MW-1005	01-Feb-90	X				
MW-1015	26-Jan-90	X				
MW-1016	26-Jan-90	X				
MW-1019	01-Feb-90	X				
MW-1020	01-Feb-90	X				
MW-1021	01-Feb-90	X				
MW-1022	01-Feb-90	X				
MW-1023	18-Jan-90	X			X	X
MW-1024	18-Jan-90	X			X	X
MW-1025	18-Jan-90	X			X	X
MW-1037	19-Jan-90	X				
MW-1038	19-Jan-90	X				
MW-1039	19-Jan-90	X				
MW-1044	26-Jan-90	X				
MW-1045	12-Feb-90	X		X		

(Continued.)

(a) - The letters 'S' and 'D' associated with the monitoring well numbers are part of the well identification notation and do not refer to monitoring zones at McClellan AFB.

EW = Extraction Well

MW = Monitoring Well

TABLE 1-1. (Continued.)

Well (a) Number	Date Sampled	Method				
		8010	8020	8240	6010	7196
MW-1046	14-Feb-90	X			X	
MW-1047	14-Feb-90	X			X	X
MW-1048	15-Feb-90	X			X	X
MW-1049	09-Feb-90	X				
MW-1050	09-Feb-90	X				
MW-1051	09-Feb-90	X			X	X
MW-1052	12-Feb-90	X				
MW-1053	23-Feb-90	X				

(a) - The letters 'S' and 'D' associated with the monitoring well numbers are part of the well identification notation and do not refer to monitoring zones at McClellan AFB.

EW = Extraction Well

MW = Monitoring Well

TABLE 1-4. QUARTERLY GROUNDWATER LEVEL DATA,  
 GROUND WATER SAMPLING AND ANALYSIS PROGRAM,  
 JANUARY THROUGH MARCH 1990, McCLELLAN AIR FORCE BASE

=====			
Groundwater Level Elevation (feet above mean sea level)			
Well		Current Measurement	Previous Measurement
Number(a)	Area	1Q90	4Q89
-----			
<u>Shallow Zone Monitoring Wells:</u>			
MW-7	B	- 40.21	- 44.13
MW-10	D	- 35.09	- 35.78
MW-11	D	- 34.30	- 36.21
MW-12	D	- 34.74	- 35.38
MW-14	D	- 35.13	- 35.76
MW-15	D	- 34.79	- 35.44
MW-16D	OTHER	- 29.70	- 32.26
MW-33S	C	- 36.48	- 37.44
MW-36S	C	- 33.30	- 33.40
MW-41S	B	- 40.31	- 41.33
MW-44S	C	- 34.24	- 34.57
MW-49S	OTHER	- 30.17	- 32.97
MW-60	C	- 34.70	- 34.96
MW-61	C	- 37.27	- 38.06
MW-62	C	- 33.27	- 34.46
MW-65	B	- 39.89	- 40.92
MW-67	A	- 32.09	- 34.25
MW-68	A	- 35.37	- 37.74
MW-88	D	- 34.07	- 34.27
MW-89	D	- 34.63	- 35.15
MW-90	D	- 34.68	- 35.23
MW-91	D	- 34.39	- 35.50
MW-92	D	- 34.21	- 35.33
MW-101	OTHER	- 30.18	- 33.57
MW-102	OTHER	- 28.26	- 28.87
MW-106	OTHER	- 32.76	- 32.87
MW-107	C	- 33.40	NM (b)
MW-110	C	- 33.53	- 33.57
MW-111	C	- 34.31	- 34.58
MW-114	C	- 36.05	NM (b)
MW-116	OTHER	- 37.92	- 38.24
MW-128	C	- 36.83	- 35.90
MW-131	C	- 37.72	- 38.89
MW-139	C	- 38.35	- 40.05
MW-155	B	- 40.29	NM (e)
MW-157	B	- 40.32	NM (e)
MW-158	B	- 40.36	NM (e)
MW-1002	NORTHWEST	- 33.70	- 34.85
-----			

(Continued.)

- NM = Not measured      MW = Monitoring Well      EW = Extraction Well  
 (a) = The letters 'S' and 'D' associated with monitoring well numbers are part of the well identification notation and do not refer to monitoring zones at McClellan AFB.  
 (b) = Well dry      (c) = Blocked well access  
 (d) = Well under repair      (e) = EE/CA well during 4Q89

TABLE 1-4. (Continued.)

<u>Groundwater Level Elevation (feet above mean sea level)</u>			
Well		Current Measurement	Previous Measurement
Number(a)	Area	1Q90	4Q89
-----			
<u>Shallow Zone Monitoring Wells:</u>			
MW-1004	NORTHWEST	- 33.05	- 34.55
MW-1005	NORTHWEST	- 32.83	- 34.63
MW-1009	NORTHWEST	- 31.92	- 32.51
MW-1011	SOUTHWEST	- 36.75	NM (c)
MW-1012	NORTHEAST	- 24.61	- 25.38
MW-1013	SOUTHEAST	- 40.55	NM (b)
MW-1014	SOUTHEAST	- 37.36	- 39.33
MW-1016	SOUTHWEST	- 41.22	- 45.39
MW-1017	WEST	- 35.89	- 35.09
MW-1018	WEST	- 33.82	- 33.69
MW-1019	NORTHWEST	- 31.53	- 31.44
MW-1020	SOUTHWEST	- 40.32	- 44.96
MW-1021	SOUTHWEST	- 40.72	- 46.42
MW-1023	SOUTHWEST	- 41.47	- 44.98
MW-1026	NORTHWEST	- 32.30	- 33.14
MW-1029	NORTHWEST	- 31.04	- 32.38
MW-1033	WEST	- 37.17	- 37.83
MW-1036	WEST	- 31.98	- 31.55
MW-1037	SOUTHEAST	- 28.55	- 30.99
MW-1041	NORTHWEST	- 32.39	- 33.58
MW-1044	SOUTHWEST	- 40.95	- 45.51
MW-1053	SOUTHWEST	- 42.53	NM (e)
<u>Middle Zone Monitoring Wells:</u>			
MW-170	OTHER	- 30.80	- 33.74
MW-180	OTHER	- 31.96	- 33.29
MW-190	D	- 33.90	- 34.60
MW-200	C	- 35.28	- 36.56
MW-210	C	- 35.55	- 35.56
MW-230	B	- 40.61	- 48.20
MW-240	OTHER	- 39.80	- 43.21
MW-250	A	- 37.04	- 38.07
MW-260	A	- 35.42	- 39.18
MW-270	A	- 33.06	- 36.23
MW-280	SOUTHEAST	- 33.03	- 34.95
MW-290	OTHER	- 31.60	- 33.61
MW-52	D	- 33.80	- 34.73
MW-53	D	- 34.83	- 35.54
MW-54	D	- 34.41	- 35.83
MW-55	D	- 35.37	- 35.94

(Continued.)

NM = Not measured

MW = Monitoring Well

EW = Extraction Well

(a) = The letters 'S' and 'D' associated with monitoring well numbers are part of the well identification notation and do not refer to monitoring zones at McClellan AFB.

(b) = Well dry

(c) = Blocked well access

(d) = Well under repair

(e) = EE/CA well during 4Q89

TABLE 1-4. (Continued.)

=====			
Groundwater Level Elevation (feet above mean sea level)			
Well		Current Measurement	Previous Measurement
Number(a)	Area	1Q90	4Q89
-----			
<u>Middle Zone Monitoring Wells:</u>			
MW-57	D	- 34.66	- 35.52
MW-69	A	- 35.15	- 38.95
MW-70	D	- 34.06	- 34.94
MW-71	A	- 32.40	- 35.35
MW-72	D	- 35.20	- 35.86
MW-74	NORTHWEST	- 34.64	- 35.42
MW-75	C	- 37.69	- 37.44
MW-76	NORTHWEST	- 34.10	- 35.22
MW-100	OTHER	- 30.47	- 33.58
MW-103	OTHER	- 28.89	- 32.09
MW-108	C	- 33.62	- 34.39
MW-113	C	- 34.83	- 35.01
MW-115	C	- 36.88	- 37.63
MW-121	B	- 38.64	- 41.33
MW-129	C	- 37.24	- 38.34
MW-135	C	- 39.23	- 41.30
MW-145	B	- 39.80	- 43.48
MW-150	B	- 41.32	- 44.84
MW-153	B	- 40.62	- 42.28
MW-1000	SOUTHWEST	- 40.28	NM (c)
MW-1003	NORTHWEST	- 33.06	- 34.56
MW-1010	NORTHWEST	- 32.37	- 33.97
MW-1015	SOUTHWEST	- 42.73	- 44.71
MW-1022	SOUTHWEST	- 40.21	- 51.18
MW-1024	SOUTHWEST	- 43.55	- 45.38
MW-1027	NORTHWEST	- 32.68	- 34.28
MW-1030	NORTHWEST	- 31.72	- 33.39
MW-1032	WEST	- 34.14	- 34.28
MW-1034	WEST	- 37.68	- 37.24
MW-1038	SOUTHEAST	- 42.45	- 38.58
MW-1042	NORTHWEST	- 31.79	- 33.82
MW-1049	SOUTHWEST	- 29.71	- 45.71
<u>Deep A Zone Monitoring Wells:</u>			
MW-220	C	- 37.98	- 39.94
MW-51	D	- 33.89	- 34.81
MW-58	D	- 33.69	- 34.74
MW-59	D	- 33.84	- 34.64
MW-63	B	- 39.14	- 45.78
MW-64	B	- 39.68	- 47.60
-----			

(Continued.)

NM = Not measured

MW = Monitoring Well

EW = Extraction Well

(a) = The letters 'S' and 'D' associated with monitoring well numbers are part of the well identification notation and do not refer to monitoring zones at McClellan AFB.

(b) = Well dry

(c) = Blocked well access

(d) = Well under repair

(e) = EE/CA well during 4Q89

TABLE 1-4. (Continued.)

Groundwater Level Elevation (feet above mean sea level)			
Well		Current Measurement	Previous Measurement
Number(a)	Area	1Q90	4Q89
-----			
<u>Deep A Zone Monitoring Wells:</u>			
MW-66	B	- 40.33	- 49.98
MW-104	D	- 32.83	- 34.07
MW-105	D	- 32.81	- 34.28
MW-109	C	- 33.76	- 34.61
MW-112	C	- 34.66	- 35.14
MW-122	B	- 37.40	- 42.33
MW-130	C	- 38.72	- 40.55
MW-134	C	- 38.68	- 41.40
MW-142	C	- 38.24	- 40.59
MW-143	C	- 37.43	- 39.22
MW-146	B	- 39.57	- 43.73
MW-151	B	- 40.64	- 46.54
MW-156	B	- 39.25	NM (e)
MW-1001	NORTHWEST	- 32.97	- 34.54
MW-1025	SOUTHWEST	- 45.90	- 46.83
MW-1028	NORTHWEST	- 32.34	- 34.29
MW-1031	NORTHWEST	- 31.93	- 33.24
MW-1035	WEST	- 37.60	- 38.66
MW-1039	SOUTHEAST	- 36.53	- 38.79
MW-1040	NORTHEAST	- 30.69	- 34.60
MW-1043	NORTHWEST	- 32.70	- 33.85
MW-1045	SOUTHWEST	- 40.00	- 47.41
MW-1050	SOUTHWEST	- 41.69	- 45.82
<u>Deep B Zone Monitoring Wells:</u>			
MW-132	B	- 39.43	- 46.95
MW-133	C	- 38.64	- 42.01
MW-136	C	- 38.16	- 40.81
MW-138	C	- 37.09	- 39.95
MW-147	B	- 39.22	- 44.05
MW-148	B	- 37.48	- 43.14
MW-149	B	- 37.05	- 42.36
MW-152	B	- 40.78	- 48.58
MW-154	B	- 38.76	- 47.28
MW-1046	SOUTHWEST	- 39.63	- 48.99
MW-1047	SOUTHWEST	- 37.44	- 43.20
MW-1048	SOUTHWEST	- 44.08	- 43.12
MW-1051	SOUTHWEST	- 41.54	46.17
MW-1052	SOUTHWEST	- 37.97	- 42.37

(Continued.)

- NM = Not measured      MW = Monitoring Well      EW = Extraction Well  
 (a) = The letters 'S' and 'D' associated with monitoring well numbers are part of the well identification notation and do not refer to monitoring zones at McClellan AFB.  
 (b) = Well dry      (c) = Blocked well access  
 (d) = Well under repair      (e) = EE/CA well during 4Q89



TABLE 1-4. (Continued.)

		<u>Groundwater Level Elevation (feet above mean sea level)</u>	
Well		Current Measurement	Previous Measurement
Number(a)	Area	1Q90	4Q89
<u>Extraction Wells</u>			
EW-73	D	NM (d)	- 52.46
EW-83	D	- 38.37	- 38.72
EW-84	D	- 41.02	- 40.10
EW-85	D	- 35.02	- 35.05
EW-86	D	- 36.79	- 37.83
EW-87	D	- 36.48	- 37.65

NM = Not measured      MW = Monitoring Well      EW = Extraction Well  
 (a) = The letters 'S' and 'D' associated with monitoring well numbers are part of the well  
      identification notation and do not refer to monitoring zones at McClellan AFB.  
 (b) = Well dry              (c) = Blocked well access  
 (d) = Well under repair      (e) = EE/CA well during 4Q89

TABLE 1-5. RESULTS OF FIELD MEASUREMENTS (pH, CONDUCTIVITY, AND TEMPERATURE).  
GROUNDWATER SAMPLING AND ANALYSIS PROGRAM.  
JANUARY THROUGH MARCH 1990, McCLELLAN AIR FORCE BASE

Area A and Adjacent On-Base Areas				Area B and Adjacent On-Base Areas				Area C and Adjacent On-Base Areas				Area D and Adjacent On-Base Areas				Other On-Base Areas			
Well Number	pH (umhos/cm)(Deg. C)	Temp. (Deg. C)	Cond. (umhos/cm)	Well Number	pH (umhos/cm)	Temp. (Deg. C)	Cond. (umhos/cm)	Well Number	pH (umhos/cm)	Temp. (Deg. C)	Cond. (umhos/cm)	Well Number	pH (umhos/cm)	Temp. (Deg. C)	Cond. (umhos/cm)	Well Number	pH (umhos/cm)	Temp. (Deg. C)	Cond. (umhos/cm)
<u>Shallow Zone Monitoring Wells</u>																			
MW-7	7.2	18.0	190	MW-33S	7.3	18.0	610	MW-10	6.8	700	20.0								
MW-41S	7.4	NM	270	MW-44S	6.8	NM	210	MW-11	6.7	520	20.0								
MW-65	7.6	21.0	220	MW-60	6.7	NM	210	MW-12	7.3	270	19.0								
MW-155	7.4	19.0	220	MW-61	7.2	19.0	170	MW-14	6.6	320	19.0								
MW-157	7.4	19.0	190	MW-62	7.5	19.0	250	MW-15	7.8	200	19.0								
MW-158	6.5	19.5	240	MW-128	7.0	NM	600	MW-88	7.2	30	NM								
				MW-131	7.3	NM	200	MW-89	7.5	150	18.0								
				MW-139	7.1	NM	490	MW-90	7.1	170	19.0								
								MW-92	7.2	110	19.0								
<u>Middle Zone Monitoring Wells</u>																			
MW-250	7.2	240	NM	MW-200	7.1	260	19.0	MW-190	7.3	200	20.0								
MW-260	7.2	160	NM	MW-75	7.2	230	18.0	MW-52	7.4	190	NM								
MW-71	7.5	210	18.5	MW-115	7.4	260	NM	MW-53	7.5	220	NM								
				MW-129	7.3	210	NM	MW-54	7.1	230	19.0								
				MW-135	7.9	150	19.0	MW-55	7.7	160	19.5								
								MW-57	7.4	60	NM								
								MW-70	7.9	180	NM								
								MW-72	7.2	460	20.0								
<u>Deep A Zone Monitoring Wells</u>																			
MW-63	6.5	320	18.0	MW-220	7.3	150	19.0	MW-51	7.6	420	NM								
MW-64	7.4	190	19.0	MW-130	7.1	290	NM	MW-58	7.7	190	19.0								
MW-66	7.6	160	20.0	MW-134	7.9	120	NM	MW-104	7.4	240	NM								
MW-146	7.3	280	NM	MW-142	7.4	190	20.0	MW-105	8.1	290	NM								
MW-151	7.6	190	19.0	MW-143	7.4	180	NM												
MW-156	7.3	310	20.0																
<u>Deep B Zone Monitoring Wells</u>																			
MW-132	7.4	270	NM	MW-133	7.4	190	18.5												
MW-147	7.2	280	NM	MW-136	7.5	430	17.0												
MW-148	7.0	230	20.0	MW-138	7.8	260	NM												
MW-149	7.0	240	NM																
MW-152	7.5	220	20.0																
MW-154	8.2	210	19.5																

(Continued.)

NM = Not Measured MW = Monitoring Well EW = Extraction Well

TABLE 1-5. (Continued)

Area A and Adjacent On-Base Areas				Area B and Adjacent On-Base Areas				Area C and Adjacent On-Base Areas				Area D and Adjacent On-Base Areas				Other On-Base Areas			
Well Number	pH	Cond. (umhos/cm)	Temp. (Deg.C)	Well Number	pH	Cond. (umhos/cm)	Temp. (Deg.C)	Well Number	pH	Cond. (umhos/cm)	Temp. (Deg.C)	Well Number	pH	Cond. (umhos/cm)	Temp. (Deg.C)	Well Number	pH	Cond. (umhos/cm)	Temp. (Deg.C)
<b>Extraction Wells</b>																			
(Area C Extraction Wells are screened in the middle, deep "A" or deep "B" monitoring zones)																			
(Area D Extraction Wells are screened in the shallow and middle monitoring zones)																			
January:																			
				EW-137	6.9	520	19.0	EW-73	6.6	640	19.0								
				EW-140	7.2	370	19.0	EW-83	7.2	220	19.0								
				EW-141	7.2	420	19.0	EW-84	6.6	700	19.5								
				EW-144	7.1	350	19.0	EW-85	7.2	250	21.0								
								EW-86	7.2	220	19.0								
								EW-87	7.3	210	19.0								
February:																			
				EW-137	7.1	480	NM	EW-73	6.8	570	NM								
				EW-140	7.3	370	NM	EW-83	7.5	230	NM								
				EW-141	7.3	400	NM	EW-84	7.0	640	NM								
				EW-144	7.3	320	NM	EW-85	7.5	220	NM								
								EW-86	7.4	210	NM								
								EW-87	7.4	200	NM								
March:																			
				EW-137	7.1	370	19.0	EW-73	7.8	510	18.0								
				EW-140	6.7	620	19.0	EW-83	7.4	220	18.0								
				EW-141	7.1	310	19.0	EW-84	6.8	220	19.0								
				EW-144	7.2	260	19.0	EW-85	7.3	220	18.0								
								EW-87	7.4	210	19.0								

(Continued.)

NM = Not Measured MW = Monitoring Well EW = Extraction Well

TABLE 1-5. (Continued)

Southeast Area				Southwest Area				West Area				Northwest Area				Northeast Area			
Well Number	pH	Cond. (umhos/cm)	Temp. (Deg. C)	Well Number	pH	Cond. (umhos/cm)	Temp. (Deg. C)	Well Number	pH	Cond. (umhos/cm)	Temp. (Deg. C)	Well Number	pH	Cond. (umhos/cm)	Temp. (Deg. C)	Well Number	pH	Cond. (umhos/cm)	Temp. (Deg. C)
Shallow Zone Monitoring Wells																			
MW-1037	7.0	350	NM	MW-1016	7.3	320	19.0	MW-1002	7.4	120	17.0								
				MW-1020	7.4	230	19.0	MW-1004	6.5	140	19.0								
				MW-1021	7.8	200	18.0	MW-1005	7.8	220	NM								
				MW-1023	NM	180	NM	MW-1019	7.1	510	18.0								
				MW-1044	7.5	320	NM												
				MW-1053	7.7	260	20.0												
Middle Zone Monitoring Wells																			
MW-280	7.3	160	18.0	MW-1000	7.4	180	19.5	MW-74	7.6	190	21.0								
MW-1038	7.0	230	NM	MW-1015	7.7	190	19.0	MW-76	8.3	210	20.0								
				MW-1022	7.5	210	NM	MW-1003	6.4	120	19.0								
				MW-1024	NM	180	NM												
				MW-1049	7.6	260	19.0												
Deep A Zone Monitoring Wells																			
MW-1039	7.2	220	NM	MW-1025	7.4	230	NM	MW-1001	5.4	140	18.0								
				MW-1045	7.2	270	NM												
				MW-1050	7.4	230	19.0												
Deep B Zone Monitoring Wells																			
				MW-1046	8.2	300	NM												
				MW-1047	8.1	380	18.5												
				MW-1048	7.2	310	19.0												
				MW-1051	8.9	200	NM												
				MW-1052	7.9	280	NM												
NM = Not Measured      MW = Monitoring Well      EW = Extraction Well																			

NM = Not Measured    MW = Monitoring Well    EW = Extraction Well

TABLE 1-6 WELLS CONTAINING ANALYTES AT CONCENTRATIONS EQUAL TO OR EXCEEDING STATE AND FEDERAL DRINKING WATER STANDARDS, GROUNDWATER SAMPLING AND ANALYSIS PROGRAM, JANUARY THROUGH MARCH 1990, McCLELLAN AIR FORCE BASE

Well Number	Date Sampled	Area	Method	Analyte Detected	Field Duplicate Analysis	Lab	Concentration	Maximum Contaminant Level Or Action Level
EW-73	23-Jan-90	D	8240	1,1,1-Trichloroethane		RAS	550.	200. MCL
				1,1-Dichloroethene		RAS	6600.	6.0 MCL
				Trichloroethene		RAS	1000.	5.0 MCL
				Vinyl Chloride		RAS	1100.	0.50 MCL
				1,1,1-Trichloroethane	FD	RAS	630.	200. MCL
				1,1-Dichloroethene	FD	RAS	7600.	6.0 MCL
				Trichloroethene	FD	RAS	1100.	5.0 MCL
				Vinyl Chloride	FD	RAS	1300.	0.50 MCL
	02-Feb-90	D	8010	1,1,1-Trichloroethane		RAS	770. C	200. MCL
				1,1,2-Trichloroethane		RAS	140. C	32. MCL
				1,1-Dichloroethene		RAS	6900. GC	6.0 MCL
				1,2-Dichloroethane		RAS	43. C	0.50 MCL
				Total 1,2-Dichloroethene		RAS	390. C	16. AL
				Trichloroethene		RAS	1200. C	5.0 MCL
				Vinyl Chloride		RAS	930. C	0.50 MCL
	02-Mar-90	D	8010	1,1,1-Trichloroethane		RAS	990. PI	200. MCL
				1,1-Dichloroethene		RAS	8300. PI	6.0 MCL
				Total 1,2-Dichloroethene		RAS	910. PI	16. AL
				Trichloroethene		RAS	1200. PI	5.0 MCL
				Vinyl Chloride		RAS	1700. PI	0.50 MCL
EW-83	23-Jan-90	D	8240	1,1-Dichloroethene		RAS	610.	6.0 MCL
				Trichloroethene		RAS	83.	5.0 MCL
	02-Feb-90	D	8010	1,1-Dichloroethene		RAS	560. C	6.0 MCL
				Tetrachloroethene		RAS	28. C	5.0 MCL
				Trichloroethene		RAS	140. C	5.0 MCL
	02-Mar-90	D	8010	1,1-Dichloroethene		RAS	770. CI	6.0 MCL
				Trichloroethene		RAS	79. CI	5.0 MCL
	23-Jan-90	D	8240	1,1-Dichloroethene		RAS	1100.	6.0 MCL
				1,2-Dichloroethane		RAS	130.	0.50 MCL
				Trichloroethene		RAS	970.	5.0 MCL
				Vinyl Chloride		RAS	430.	0.50 MCL
	02-Feb-90	D	8010	1,1-Dichloroethene		RAS	950. C	6.0 MCL

All units are ug/L.

AL = DHS Action Level

FD = Field duplicate

I = Result differs from last issue of report - see report narrative

MCL = DHS Maximum contaminant level

PMCL = U.S. EPA Primary Maximum Contaminant Level

(2) = Result obtained from secondary column

(a),(b),(c) = Result qualified due to one of the following analytical considerations:

(a) = Coelution

(b) = Interference

(c) = Random error

(Continued.)

C = Confirmed on second column

G = Exceeds calibration range

P = Previously confirmed

RAS = Radian Analytical Services, Sacramento

TABLE 1-6 (Continued.)

Well Number	Date Sampled	Area	Method	Analyte Detected	Field Duplicate Analysis	Lab	Concentration	Maximum Contaminant Level Or Action Level	
EW-84	02-Feb-90	D	8010	1,2-Dichloroethane		RAS	150. C	0.50 MCL	
				Tetrachloroethene		RAS	23. C	5.0 MCL	
				Total 1,2-Dichloroethene		RAS	360. C	16. AL	
				Trichloroethene		RAS	1200. C	5.0 MCL	
	02-Mar-90	D	8010	1,1,2,2-Tetrachloroethane		RAS	17. CI	1.0 MCL	
				1,1-Dichloroethene		RAS	1300. CI	6.0 MCL	
				1,2-Dichloroethane		RAS	120. CI	0.50 MCL	
				Total 1,2-Dichloroethene		RAS	170. CI	16. AL	
				Trichloroethene		RAS	1100. CI	5.0 MCL	
				Vinyl Chloride		RAS	420. CI	0.50 MCL	
	EW-85	23-Jan-90	D	8240	1,1-Dichloroethene		RAS	610.	6.0 MCL
					1,2-Dichloroethane		RAS	11.	0.50 MCL
					Trichloroethene		RAS	410.	5.0 MCL
		02-Feb-90	D	8010	1,1-Dichloroethene		RAS	450. C	6.0 MCL
Tetrachloroethene						RAS	400. (a)	5.0 MCL	
Trichloroethene						RAS	580. C	5.0 MCL	
02-Mar-90		D	8010	1,1,1-Trichloroethane		RAS	200. CI	200. MCL	
				1,1-Dichloroethene		RAS	720. CI	6.0 MCL	
				1,2-Dichloroethane		RAS	12. CI	0.50 MCL	
				Trichloroethene		RAS	400. CI	5.0 MCL	
EW-86	23-Jan-90	D	8240	1,1-Dichloroethene		RAS	48.	6.0 MCL	
				Trichloroethene		RAS	19.	5.0 MCL	
	02-Feb-90	D	8010	1,1-Dichloroethene		RAS	40. C	6.0 MCL	
				Tetrachloroethene		RAS	23. (a)	5.0 MCL	
				Trichloroethene		RAS	33. C	5.0 MCL	
	EW-87	23-Jan-90	D	8240	1,1-Dichloroethene		RAS	120.	6.0 MCL
Trichloroethene						RAS	59.	5.0 MCL	
02-Feb-90		D	8010	1,1-Dichloroethene		RAS	100. C	6.0 MCL	
				Trichloroethene		RAS	78. C	5.0 MCL	

All units are ug/L.

AL = DHS Action Level

FD = Field duplicate

I = Result differs from last issue of report - see report narrative

MCL = DHS Maximum contaminant level

PMCL = U.S. EPA Primary Maximum Contaminant Level

(2) = Result obtained from secondary column

(a),(b),(c) = Result qualified due to one of the following analytical considerations:

(a) = Coelution

(b) = Interference

(c) = Random error

(Continued.)

C = Confirmed on second column

G = Exceeds calibration range

P = Previously confirmed

RAS = Radian Analytical Services, Sacramento

TABLE 1-6 (Continued.)

Well Number	Date Sampled	Area	Method	Analyte Detected	Field Duplicate		Concentration	Maximum Contaminant Level Or Action Level
					Analysis	Lab		
EW-87	02-Mar-90	D	8010	1,1-Dichloroethene		RAS	130. CI	6.0 MCL
				Trichloroethene		RAS	63. CI	5.0 MCL
EW-137	23-Jan-90	C	8010	Total 1,2-Dichloroethene		RAS	22. C	16. AL
				Trichloroethene		RAS	380. C	5.0 MCL
	02-Feb-90	C	8010	Total 1,2-Dichloroethene		RAS	19. C	16. AL
				Trichloroethene		RAS	400. C	5.0 MCL
	02-Mar-90	C	8010	Total 1,2-Dichloroethene		RAS	26. CI	16. AL
				Trichloroethene		RAS	300. CI	5.0 MCL
EW-140	23-Jan-90	C	8010	Total 1,2-Dichloroethene		RAS	39. C	16. AL
				Trichloroethene		RAS	120. C	5.0 MCL
	02-Feb-90	C	8010	Total 1,2-Dichloroethene		RAS	48. C	16. AL
				Trichloroethene		RAS	120. C	5.0 MCL
	02-Mar-90	C	8010	Total 1,2-Dichloroethene		RAS	45. PI	16. AL
				Trichloroethene		RAS	110. PI	5.0 MCL
EW-141	23-Jan-90	C	8010	Total 1,2-Dichloroethene		RAS	19. C	16. AL
				Trichloroethene		RAS	160. C	5.0 MCL
	02-Feb-90	C	8010	Total 1,2-Dichloroethene		RAS	22. C	16. AL
				Trichloroethene		RAS	140. C	5.0 MCL
	02-Mar-90	C	8010	Total 1,2-Dichloroethene		RAS	21. CI	16. AL
				Trichloroethene		RAS	130. CI	5.0 MCL
EW-144	23-Jan-90	C	8010	Total 1,2-Dichloroethene		RAS	21. C	16. AL
				Trichloroethene		RAS	710. C	5.0 MCL
	02-Feb-90	C	8010	Trichloroethene		RAS	820. C	5.0 MCL
	02-Mar-90	C	8010	Trichloroethene		RAS	540. CI	5.0 MCL
MW-7	07-Feb-90	B	8010	Total 1,2-Dichloroethene		RAS	34. C	16. AL

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(2) = Result obtained from secondary column

(a),(b),(c) = Result qualified due to one of the following analytical considerations:

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(b) = Interference

(c) = Random error

(Continued.)

C = Confirmed on second column

G = Exceeds calibration range

P = Previously confirmed

RAS = Radian Analytical Services, Sacramento

TABLE 1-6 (Continued.)

Well Number	Date Sampled	Area	Method	Analyte Detected	Field Duplicate Analysis	Lab	Concentration	Maximum Contaminant Level Or Action Level
MW-7	07-Feb-90	B	8010	Trichloroethene		RAS	47. C	5.0 MCL
MW-10	21-Feb-90	D	8010	1,1-Dichloroethene		RAS	350. C	6.0 MCL
				1,2-Dichloroethene		RAS	250. C	0.50 MCL
				Total 1,2-Dichloroethene		RAS	83. C	16. AL
				Trichloroethene		RAS	780. C	5.0 MCL
			6010	Aluminum		RAS	4300.	1000. MCL
MW-11	22-Feb-90	D	8010	1,1,1-Trichloroethane		RAS	3700. C	200. MCL
				1,1-Dichloroethene		RAS	17000. C	6.0 MCL
				Trichloroethene		RAS	3900. C	5.0 MCL
				1,1,1-Trichloroethane	FD	RAS	4400. CI	200. MCL
				1,1-Dichloroethene	FD	RAS	21000. CGI	6.0 MCL
				Trichloroethene	FD	RAS	3000. CI	5.0 MCL
MW-12	20-Feb-90	D	8010	1,1,1-Trichloroethane		RAS	860. C	200. MCL
				1,1-Dichloroethene		RAS	7800. C	6.0 MCL
				Tetrachloroethene		RAS	140. C	5.0 MCL
				Trichloroethene		RAS	1400. C	5.0 MCL
MW-14	21-Feb-90	D	8010	1,1,1-Trichloroethane		RAS	1700. C	200. MCL
				1,1-Dichloroethene		RAS	1800. C	6.0 MCL
				Trichloroethene		RAS	1900. C	5.0 MCL
MW-15	15-Feb-90	D	8010	1,1-Dichloroethene		RAS	470. C	6.0 MCL
				Trichloroethene		RAS	320. C	5.0 MCL
MW-260	31-Jan-90	A	8010	Trichloroethene		RAS	44. C	5.0 MCL
				Trichloroethene	FD	RAS	50. C	5.0 MCL
MW-33S	29-Jan-90	C	8010	Trichloroethene		RAS	12000. C	5.0 MCL
MW-41S	12-Jan-90	B	8010	Tetrachloroethene		RAS	130. C	5.0 MCL
				Trichloroethene		RAS	1800. C	5.0 MCL
MW-44S	30-Jan-90	C	8010	Trichloroethene		RAS	22. (b)	5.0 MCL

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PMCL = U.S. EPA Primary Maximum Contaminant Level

(2) = Result obtained from secondary column

(a),(b),(c) = Result qualified due to one of the following analytical considerations:

(a) = Coelution

(b) = Interference

(c) = Random error

(Continued.)

C = Confirmed on second column

G = Exceeds calibration range

P = Previously confirmed

RAS = Radian Analytical Services, Sacramento



TABLE 1-6 (Continued.)

Well Number	Date Sampled	Area	Method	Analyte Detected	Field Duplicate Analysis	Lab	Concentration	Maximum Contaminant Level Or Action Level
MW-55	15-Jan-90	D	8010	1,1,2,2-Tetrachloroethane		RAS	2.4 C	1.0 MCL
MW-57	25-Jan-90	D	8010	1,2-Dichloroethane		RAS	0.73 (c)	0.50 MCL
MW-63	16-Jan-90	B	8010	Total 1,2-Dichloroethene Trichloroethene		RAS	43. C	16. AL
						RAS	110. C	5.0 MCL
MW-65	28-Feb-90	B	8010	Trichloroethene		RAS	95. CI	5.0 MCL
MW-72	20-Feb-90	D	8010	1,1-Dichloroethene		RAS	260. C	6.0 MCL
				1,2-Dichloroethane		RAS	140. C	0.50 MCL
				Trichloroethene		RAS	700. C	5.0 MCL
MW-74	27-Feb-90	NW	8010	1,1-Dichloroethene		RAS	9.8 CI	6.0 MCL
MW-75	05-Feb-90	C	8010	Tetrachloroethene		RAS	17. C	5.0 MCL
				Trichloroethene		RAS	5.7 C	5.0 MCL
MW-89	29-Jan-90	D	8010	1,1-Dichloroethene		RAS	14. (2)(b)	6.0 MCL
MW-91	17-Jan-90	D	8010	Trichloroethene		RAS	5.4 C	5.0 MCL
MW-128	30-Jan-90	C	8010	1,1,2,2-Tetrachloroethane		RAS	250. (a)	1.0 MCL
				Trichloroethene		RAS	20000. C	5.0 MCL
				Trichloroethene	FD	RAS	21000. C	5.0 MCL
MW-129	19-Jan-90	C	8010	Trichloroethene		RAS	290. P	5.0 MCL
MW-131	26-Jan-90	C	8010	Trichloroethene		RAS	49. C	5.0 MCL
MW-132	17-Jan-90	B	8010	1,2-Dichloroethane		RAS	2.0 C	0.50 MCL
				Total 1,2-Dichloroethene		RAS	47. C	16. AL
				Trichloroethene		RAS	120. C	5.0 MCL
				Trichloroethene	FD	RAS	130. C	5.0 MCL
MW-135	22-Jan-90	C	8010	1,2-Dichloroethane		RAS	1.0 C	0.50 MCL
				Trichloroethene		RAS	19. C	5.0 MCL
				1,2-Dichloroethane	FD	RAS	2.3 C	0.50 MCL

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(a),(b),(c) = Result qualified due to one of the following analytical considerations:

(a) = Coelution

(b) = Interference

(c) = Random error

NW = Northwest area

(Continued.)

C = Confirmed on second column

G = Exceeds calibration range

P = Previously confirmed

RAS = Radian Analytical Services, Sacramento

TABLE 1-6 (Continued.)

Well Number	Date Sampled	Area	Method	Analyte Detected	Field		Concentration	Maximum Contaminant Level Or Action Level
					Duplicate Analysis	Lab		
MW-135	22-Jan-90	C	8010	Tetrachloroethene	FD	RAS	9.6 C	5.0 MCL
				Trichloroethene	FD	RAS	23. C	5.0 MCL
MW-136	30-Jan-90	C	8010	Trichloroethene		RAS	690. C	5.0 MCL
MW-139	26-Jan-90	C	8010	Total 1,2-Dichloroethene		RAS	28. C	16. AL
				Trichloroethene		RAS	110. C	5.0 MCL
MW-148	07-Feb-90	B	8010	Trichloroethene		RAS	7.2 C	5.0 MCL
MW-151	08-Feb-90	B	8010	Tetrachloroethene		RAS	6.1 P	5.0 MCL
MW-153	21-Feb-90	B	8010	Tetrachloroethene		RAS	6.5 C	5.0 MCL
				Trichloroethene		RAS	150. C	5.0 MCL
				Tetrachloroethene	FD	RAS	9.8 C	5.0 MCL
				Trichloroethene	FD	RAS	140. C	5.0 MCL
MW-156	26-Feb-90	B	8010	Total 1,2-Dichloroethene		RAS	52. IC	16. AL
				Trichloroethene		RAS	100. IC	5.0 MCL
MW-157	19-Feb-90	B	8010	Tetrachloroethene		RAS	1400. C	5.0 MCL
				Trichloroethene		RAS	5400. C	5.0 MCL
MW-158	13-Feb-90	B	8010	Tetrachloroethene		RAS	210. C	5.0 MCL
				Total 1,2-Dichloroethene		RAS	42. C	16. AL
				Trichloroethene		RAS	1500. C	5.0 MCL
MW-1004	31-Jan-90	NW	8010	1,2-Dichloroethene		RAS	0.67 (c)	0.50 MCL
MW-1005	01-Feb-90	NW	8010	1,1-Dichloroethene		RAS	11. C	6.0 MCL
MW-1021	01-Feb-90	SW	8010	Trichloroethene		RAS	13. P	5.0 MCL
				Trichloroethene	FD	RAS	12. C	5.0 MCL
MW-1022	01-Feb-90	SW	8010	Trichloroethene		RAS	5.9 C	5.0 MCL
MW-1045	12-Feb-90	SW	8010	Trichloroethene		RAS	6.4 (c)	5.0 MCL

All units are ug/L.

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FD = Field duplicate

I = Result differs from last issue of report - see report narrative

MCL = DHS Maximum contaminant level

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(2) = Result obtained from secondary column

(a),(b),(c) = Result qualified due to one of the following analytical considerations:

(a) = Coelution

(b) = Interference

(c) = Random error

NW = Northwest area

SW = Southwest area

(Continued.)

C = Confirmed on second column

G = Exceeds calibration range

P = Previously confirmed

RAS = Radian Analytical Services, Sacramento

TABLE 1-6 (Continued.)

Well Number	Date Sampled	Area	Method	Analyte Detected	Field Duplicate Analysis	Lab	Concentration	Maximum Contaminant Level Or Action Level
MW-1046	14-Feb-90	SW	8010	1,2-Dichloroethane		RAS	0.60 (b)	0.50 MCL
				Trichloroethene		RAS	20. C	5.0 MCL
MW-1049	09-Feb-90	SW	8010	Trichloroethene		RAS	13. C	5.0 MCL

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MCL = DHS Maximum contaminant level

PMCL = U.S. EPA Primary Maximum Contaminant Level

(2) = Result obtained from secondary column

(a),(b),(c) = Result qualified due to one of the following analytical considerations:

(a) = Coelution

(b) = Interference

(c) = Random error

SW = Southwest area

C = Confirmed on second column

G = Exceeds calibration range

P = Previously confirmed

RAS = Radian Analytical Services, Sacramento

TABLE 1-10 REPORT OF HOLDING TIMES,  
GROUNDWATER SAMPLING AND ANALYSIS PROGRAM,  
JANUARY THROUGH MARCH 1990, MCLELLAN AIR FORCE BASE

WELL	DATE SAMPLED	MAXIMUM HOLDING TIME		LAB ANALYSIS	LAB	METHOD		8010		8020		8240		6010		7196	
		FIELD	ANALYSIS			DATE	ANALYZED	14 days	DATE	14 days	DATE	14 days	DATE	6 months	DATE	24 hours	DATE
EV-73	23-Jan-90			MS	RAS												
EV-73	23-Jan-90			MSD	RAS												
EV-73	23-Jan-90				RAS												
EV-73	23-Jan-90	FD			RAS												
EV-73	02-Feb-90				RAS												
EV-73	02-Feb-90				RAS												
EV-83	23-Jan-90				RAS												
EV-83	02-Feb-90				RAS												
EV-83	02-Feb-90				RAS												
EV-84	23-Jan-90				RAS												
EV-84	02-Feb-90				RAS												
EV-84	02-Feb-90				RAS												
EV-85	23-Jan-90				RAS												
EV-85	23-Jan-90			AS	RAS												
EV-85	02-Feb-90				RAS												
EV-85	02-Feb-90				RAS												
EV-86	23-Jan-90				RAS												
EV-86	02-Feb-90				RAS												
EV-87	23-Jan-90				RAS												
EV-87	02-Feb-90				RAS												
EV-87	02-Feb-90				RAS												
EV-137	23-Jan-90			AS	RAS												
EV-137	23-Jan-90				RAS												
EV-137	02-Feb-90				RAS												
EV-137	02-Feb-90				RAS												
EV-140	23-Jan-90			AS	RAS												
EV-140	23-Jan-90				RAS												
EV-140	02-Feb-90				RAS												
EV-140	02-Feb-90				RAS												
EV-141	23-Jan-90			AS	RAS												
EV-141	23-Jan-90				RAS												
EV-141	02-Feb-90				RAS												
EV-141	02-Feb-90				RAS												
EV-144	23-Jan-90			AS	RAS												
EV-144	23-Jan-90				RAS												
EV-144	23-Jan-90				RAS												
EV-144	02-Feb-90				RAS												
EV-144	02-Feb-90				RAS												

(Continued )

FD = Field duplicate analysis  
MS = Matrix spike  
TB = Trip blank  
EB = Equipment blank  
AS = Analytical spike

RAS = Radian Analytical Services, Sacramento  
MSD = Matrix spike duplicate  
AB = Ambient blank  
NA = Well number not applicable to trip blanks

TABLE 1-10 (Continued.)

WELL	METHOD		MAXIMUM HOLDING TIME		8010		8020		8240		6010		7196	
	LAB	ANALYSIS	LAB	ANALYSIS	DATE	ANALYZED	DATE	ANALYZED	DATE	ANALYZED	DATE	ANALYZED	DATE	ANALYZED
	DATE	FIELD	DATE	FIELD	DATE	ANALYZED	DATE	ANALYZED	DATE	ANALYZED	DATE	ANALYZED	DATE	ANALYZED
MW-7	07-Feb-90				13-Feb-90									
MW-10	21-Feb-90				RAS									
MW-10	21-Feb-90				RAS									
MW-10	21-Feb-90	AS			RAS									
MW-10	21-Feb-90		AB		RAS									
MW-11	22-Feb-90				MS									
MW-11	22-Feb-90				MSD									
MW-11	22-Feb-90				RAS									
MW-11	22-Feb-90				RAS									
MW-11	22-Feb-90		FD		RAS									
MW-12	20-Feb-90				RAS									
MW-12	20-Feb-90		EB		RAS									
MW-14	21-Feb-90				RAS									
MW-15	15-Feb-90				RAS									
MW-190	28-Feb-90				RAS									
MW-200	23-Jan-90				AS									
MW-200	23-Jan-90				RAS									
MW-210	31-Jan-90				AS									
MW-210	31-Jan-90				RAS									
MW-220	26-Jan-90				AS									
MW-220	26-Jan-90				RAS									
MW-230	16-Jan-90				AS									
MW-240	16-Jan-90				RAS									
MW-240	16-Jan-90		AB		RAS									
MW-250	31-Jan-90				RAS									
MW-260	31-Jan-90				MS									
MW-260	31-Jan-90				MSD									
MW-260	31-Jan-90				RAS									
MW-260	31-Jan-90		FD		RAS									
MW-280	24-Jan-90				RAS									
MW-335	29-Jan-90				AS									
MW-335	29-Jan-90				RAS									
MW-415	12-Jan-90				AS									
MW-445	30-Jan-90				RAS									
MW-445	30-Jan-90				RAS									
MW-51	12-Jan-90				RAS									
MW-52	23-Jan-90				RAS									
MW-53	18-Jan-90				RAS									
MW-54	24-Jan-90				AS									
MW-54	24-Jan-90				RAS									
MW-54	24-Jan-90				RAS									

(Continued )

 FD = Field duplicate analysis  
 MS = Matrix spike  
 TB = Trip blank  
 EB = Equipment blank  
 AS = Analytical spike

 RAS = Radian Analytical Services, Sacramento  
 MSD = Matrix spike duplicate  
 AB = Ambient blank  
 NA = Well number not applicable to trip blanks

TABLE 1-10. (Continued )

WELL	MAXIMUM HOLDING TIME		METHOD		8010		8020		8240		6010		7196	
	DATE SAMPLED	FIELD ANALYSIS	LAB ANALYSIS	LAB	DATE ANALYZED	14 days	DATE ANALYZED	14 days	DATE ANALYZED	14 days	DATE ANALYZED	6 months	DATE ANALYZED	24 hours
MV-55	15-Jan-90			RAS	16-Jan-90									
MV-57	25-Jan-90			RAS	28-Jan-90									
MV-58	22-Jan-90			RAS	23-Jan-90									
MV-59	24-Jan-90			RAS	25-Jan-90									
MV-60	30-Jan-90		AS	RAS	01-Feb-90									
MV-61	23-Jan-90		AS	RAS										
MV-62	23-Jan-90		AS	RAS										
MV-62	23-Jan-90		MS	RAS	25-Jan-90									
MV-62	23-Jan-90		MSD	RAS	25-Jan-90									
MV-62	23-Jan-90	FD	AS	RAS	25-Jan-90									24-Jan-90
MV-62	23-Jan-90	FD		RAS	25-Jan-90									24-Jan-90
MV-63	16-Jan-90			RAS	18-Jan-90									
MV-64	13-Feb-90			RAS	18-Feb-90									
MV-64	13-Feb-90	EB		RAS	18-Feb-90									
MV-65	28-Feb-90			RAS	01-Mar-90									
MV-66	19-Feb-90		AS	RAS										
MV-66	19-Feb-90			RAS	22-Feb-90									
MV-70	25-Jan-90		AS	RAS										
MV-71	02-Feb-90			RAS	28-Jan-90									
MV-71	02-Feb-90			RAS	06-Feb-90									25-Jan-90
MV-72	02-Feb-90	AB		RAS	06-Feb-90									
MV-72	20-Feb-90			RAS	24-Feb-90									
MV-74	27-Feb-90			RAS	28-Feb-90									
MV-75	05-Feb-90		AS	RAS										
MV-75	05-Feb-90			RAS	09-Feb-90									
MV-75	05-Feb-90			RAS	10-Feb-90									
MV-75	05-Feb-90			RAS	01-Mar-90									
MV-76	28-Feb-90			RAS	28-Jan-90									
MV-89	29-Jan-90		AS	RAS										
MV-89	29-Jan-90			RAS	05-Feb-90									30-Jan-90
MV-90	20-Feb-90			RAS	22-Feb-90									
MV-91	17-Jan-90			RAS	18-Jan-90									
MV-92	17-Jan-90		AS	RAS										
MV-92	17-Jan-90	FD		RAS	18-Jan-90									18-Jan-90
MV-92	17-Jan-90	FD	MS	RAS	18-Jan-90									18-Jan-90

(Continued )

FD = Field duplicate analysis  
MS = Matrix spike  
TB = Trip blank  
EB = Equipment blank  
AS = Analytical spike  
RAS = Radian Analytical Services, Sacramento  
MSD = Matrix spike duplicate  
AB = Ambient blank  
NA = Well number not applicable to trip blanks

TABLE 1-10 (Continued )

WELL	DATE SAMPLED	MAXIMUM HOLDING TIME		LAB ANALYSIS	LAB	8010		8020		8240		6010		7196	
		FIELD ANALYSIS	ANALYSIS			DATE ANALYZED	DATE ANALYZED	DATE ANALYZED	DATE ANALYZED	DATE ANALYZED	DATE ANALYZED	DATE ANALYZED	DATE ANALYZED	DATE ANALYZED	DATE ANALYZED
MW-92	17-Jan-90	FD	MSD	RAS	RAS	18-Jan-90									
MW-92	17-Jan-90	FD		RAS	RAS	18-Jan-90									
MW-104	30-Jan-90		AS	RAS	RAS										
MW-104	30-Jan-90			RAS	RAS	01-Feb-90									
MW-105	12-Jan-90			RAS	RAS	15-Jan-90									
MW-115	18-Jan-90			RAS	RAS	19-Jan-90									
MW-121	15-Jan-90			RAS	RAS	16-Jan-90									
MW-128	30-Jan-90		AS	RAS	RAS										
MW-128	30-Jan-90		MS	RAS	RAS	01-Feb-90									
MW-128	30-Jan-90		MSD	RAS	RAS	01-Feb-90									
MW-128	30-Jan-90		AS	RAS	RAS	01-Feb-90									
MW-128	30-Jan-90	FD		RAS	RAS	07-Feb-90									
MW-129	19-Jan-90		AS	RAS	RAS										
MW-130	19-Jan-90		AS	RAS	RAS	21-Jan-90									
MW-130	19-Jan-90		AS	RAS	RAS	21-Jan-90									
MW-131	26-Jan-90		AS	RAS	RAS										
MW-131	26-Jan-90			RAS	RAS	31-Jan-90									
MW-132	17-Jan-90		MS	RAS	RAS	20-Jan-90									
MW-132	17-Jan-90		MSD	RAS	RAS	20-Jan-90									
MW-132	17-Jan-90			RAS	RAS	20-Jan-90									
MW-132	17-Jan-90	FD		RAS	RAS	19-Jan-90									
MW-132	17-Jan-90	AB		RAS	RAS	18-Jan-90									
MW-133	22-Jan-90		AS	RAS	RAS										
MW-133	22-Jan-90			RAS	RAS	24-Jan-90									
MW-133	22-Jan-90		AS	RAS	RAS										
MW-134	15-Jan-90		AS	RAS	RAS	16-Jan-90									
MW-134	15-Jan-90			RAS	RAS										
MW-135	22-Jan-90		AS	RAS	RAS	23-Jan-90									
MW-135	22-Jan-90		AS	RAS	RAS										
MW-135	22-Jan-90	FD		RAS	RAS	23-Jan-90									
MW-135	22-Jan-90	FD		RAS	RAS										
MW-136	30-Jan-90		AS	RAS	RAS										
MW-136	30-Jan-90			RAS	RAS	01-Feb-90									
MW-138	29-Jan-90		AS	RAS	RAS										
MW-138	29-Jan-90			RAS	RAS	04-Feb-90									
MW-139	26-Jan-90		AS	RAS	RAS										
MW-139	26-Jan-90			RAS	RAS	31-Jan-90									
MW-142	29-Jan-90		AS	RAS	RAS										

(Continued )

RAS = Radian Analytical Services, Sacramento  
MSD = Matrix spike duplicate  
AB = Ambient blank  
NA = Well number not applicable to trip blanks

FD = Field duplicate analysis  
MS = Matrix spike  
TB = Trip blank  
EB = Equipment blank  
AS = Analytical spike

TABLE 1-10 (Continued.)

WELL	METHOD		MAXIMUM HOLDING TIME		LAB		LAB		DATE		DATE		DATE		DATE		DATE	
	ANALYSIS		ANALYSIS		ANALYSIS		ANALYSIS		ANALYSIS		ANALYSIS		ANALYSIS		ANALYSIS		ANALYSIS	
MW-142	29-Jan-90																	
MW-143	16-Jan-90																	
MW-143	16-Jan-90																	
MW-145	25-Jan-90																	
MW-146	06-Feb-90																	
MW-146	06-Feb-90																	
MW-147	06-Feb-90																	
MW-147	06-Feb-90																	
MW-148	07-Feb-90																	
MW-149	07-Feb-90																	
MW-149	07-Feb-90																	
MW-150	22-Feb-90																	
MW-151	08-Feb-90																	
MW-152	08-Feb-90																	
MW-153	21-Feb-90																	
MW-153	21-Feb-90																	
MW-153	21-Feb-90																	
MW-153	21-Feb-90																	
MW-154	08-Feb-90																	
MW-154	08-Feb-90																	
MW-155	26-Feb-90																	
MW-156	26-Feb-90																	
MW-157	19-Feb-90																	
MW-157	19-Feb-90																	
MW-158	13-Feb-90																	
MW-1000	19-Feb-90																	
MW-1000	19-Feb-90																	
MW-1001	31-Jan-90																	
MW-1001	31-Jan-90																	
MW-1002	17-Jan-90																	
MW-1003	31-Jan-90																	
MW-1003	31-Jan-90																	
MW-1004	31-Jan-90																	
MW-1004	31-Jan-90																	
MW-1004	31-Jan-90																	
MW-1004	31-Jan-90																	
MW-1005	01-Feb-90																	

(Continued )

FD = Field duplicate analysis  
 MS = Matrix spike  
 TB = Trip blank  
 EB = Equipment blank  
 AS = Analytical spike  
 RAS = Radian Analytical Services, Sacramento  
 MSD = Matrix spike duplicate  
 AB = Ambient blank  
 NA = Well number not applicable to trip blanks



TABLE 1-10 (Continued.)

		METHOD		MAXIMUM HOLDING TIME		8010		8020		8240		6010		7196	
						14 days		14 days		14 days		6 months		24 hours	
WELL	DATE SAMPLED	FIELD ANALYSIS	LAB ANALYSIS	LAB	DATE ANALYZED	DATE ANALYZED	DATE ANALYZED	DATE ANALYZED	DATE ANALYZED	DATE ANALYZED	DATE ANALYZED	DATE ANALYZED	DATE ANALYZED	DATE ANALYZED	DATE ANALYZED
MV-1015	26-Jan-90			RAS	31-Jan-90										
MV-1016	26-Jan-90			RAS	31-Jan-90										
MV-1019	01-Feb-90			RAS	11-Feb-90										
MV-1019	01-Feb-90	AB		RAS	11-Feb-90										
MV-1020	01-Feb-90			RAS	11-Feb-90										
MV-1021	01-Feb-90			RAS	11-Feb-90										
MV-1021	01-Feb-90	FD	MS	RAS	12-Feb-90										
MV-1021	01-Feb-90	FD	MSD	RAS	12-Feb-90										
MV-1021	01-Feb-90	FD		RAS	12-Feb-90										
MV-1022	01-Feb-90			RAS	11-Feb-90										
MV-1023	18-Jan-90		AS	RAS								29-Jan-90			
MV-1023	18-Jan-90			RAS	19-Jan-90							29-Jan-90		19-Jan-90	
MV-1024	18-Jan-90		AS	RAS								29-Jan-90		19-Jan-90	
MV-1024	18-Jan-90			RAS	19-Jan-90							29-Jan-90		19-Jan-90	
MV-1025	18-Jan-90		AS	RAS								26-Jan-90		19-Jan-90	
MV-1025	18-Jan-90			RAS	19-Jan-90							26-Jan-90		19-Jan-90	
MV-1037	19-Jan-90			RAS	19-Jan-90										
MV-1038	19-Jan-90			RAS	19-Jan-90										
MV-1039	19-Jan-90			RAS	19-Jan-90										
MV-1039	19-Jan-90	AB		RAS	21-Jan-90										
MV-1044	26-Jan-90		MS	RAS	31-Jan-90										
MV-1044	26-Jan-90		MSD	RAS	31-Jan-90										
MV-1044	26-Jan-90			RAS	31-Jan-90										
MV-1045	26-Jan-90	FD		RAS	31-Jan-90										
MV-1045	12-Feb-90			RAS	16-Feb-90					19-Feb-90					
MV-1046	14-Feb-90		AS	RAS								28-Feb-90			
MV-1046	14-Feb-90			RAS	18-Feb-90							28-Feb-90			
MV-1047	14-Feb-90		AS	RAS								28-Feb-90			
MV-1047	14-Feb-90			RAS	21-Feb-90							28-Feb-90		15-Feb-90	
MV-1047	14-Feb-90	EB	AS	RAS								28-Feb-90		15-Feb-90	
MV-1047	14-Feb-90	EB		RAS	21-Feb-90							28-Feb-90		15-Feb-90	
MV-1048	15-Feb-90		AS	RAS								28-Feb-90		16-Feb-90	
MV-1048	15-Feb-90			RAS	21-Feb-90							28-Feb-90			
MV-1049	09-Feb-90			RAS	13-Feb-90										
MV-1049	09-Feb-90	EB		RAS	16-Feb-90										
MV-1050	09-Feb-90			RAS	13-Feb-90										
MV-1051	09-Feb-90		AS	RAS								22-Feb-90		09-Feb-90	
MV-1051	09-Feb-90			RAS	13-Feb-90							22-Feb-90			
MV-1052	12-Feb-90			RAS	16-Feb-90										

(Continued )

RAS = Radian Analytical Services, Sacramento  
MSD = Matrix spike duplicate  
AB = Ambient blank  
NA = Well number not applicable to trip blanks

FD = Field duplicate analysis  
MS = Matrix spike  
TB = Trip blank  
EB = Equipment blank  
AS = Analytical spike

TABLE 1-10 (Continued)

WELL	DATE SAMPLED	FIELD ANALYSIS	LAB ANALYSIS	LAB	METHOD MAXIMUM HOLDING TIME			
					8010 14 days	8020 14 days	8240 14 days	6010 6 months
					DATE ANALYZED	DATE ANALYZED	DATE ANALYZED	DATE ANALYZED
MW-1052	12-Feb-90	EB		RAS	16-Feb-90			7196 24 hours
MW-1053	23-Feb-90			RAS	27-Feb-90			
MW-1053	23-Feb-90	TB		RAS	27-Feb-90			
MW-1053	23-Feb-90	AB		RAS	27-Feb-90			
NA	17-Jan-90	TB		RAS	18-Jan-90			
NA	17-Jan-90	TB		RAS	18-Jan-90			
NA	23-Jan-90	TB		RAS	24-Jan-90			
NA	23-Jan-90	TB		RAS	25-Jan-90			
NA	01-Feb-90	TB		RAS	11-Feb-90			
NA	01-Feb-90	TB		RAS	11-Feb-90			
NA	07-Feb-90	TB		RAS	12-Feb-90			
NA	26-Feb-90	TB		RAS	28-Feb-90			

ED = Field duplicate analysis  
MS = Matrix spike  
TB = Trip blank  
EB = Equipment blank  
AS = Analytical spike

RAS = Radian Analytical Services, Sacramento  
MSD = Matrix spike duplicate  
AB = Ambient blank  
NA = Well number not applicable to trip blanks

TABLE 1-11 MASTER LOG OF WELLS SAMPLED FOR METHOD 8010 FOR AREA A AND ADJACENT ON-BASE AREAS,  
GROUNDWATER SAMPLING AND ANALYSIS PROGRAM,  
JANUARY TO MARCH 1990, MCCLELLAN AIR FORCE BASE

Ground Water Zone Date Sampled Sampled By Date Analyzed Lab Field Analysis Lab Analysis	MW-25D			MW-26D			MW-26D			MW-71		
	Maximum Contaminant Level Or Action Level	Result	Detection Limit	Maximum Contaminant Level Or Action Level	Result	Detection Limit	Maximum Contaminant Level Or Action Level	Result	Detection Limit	Maximum Contaminant Level Or Action Level	Result	Detection Limit
1,1,1,2-Tetrachloroethane	NE	ND	(5)	ND	ND	(25)	ND	ND	(25)	ND	ND	(5)
1,1,1-Trichloroethane	200	ND	(0.2)	ND	ND	(1)	ND	ND	(1)	ND	ND	(0.2)
1,1,2,2-Tetrachloroethane	1	ND	(0.15)	ND	ND	(0.75)	ND	ND	(0.75)	ND	ND	(0.15)
1,1,2-Trichloroethane	32	ND	(0.2)	ND	ND	(1)	ND	ND	(1)	ND	ND	(0.2)
1,1-Dichloroethane	NE	ND	(0.5)	ND	ND	(2.5)	ND	ND	(2.5)	ND	ND	(0.5)
1,1-Dichloroethane	6	ND	(0.2)	ND	ND	(1)	ND	ND	(1)	ND	ND	(0.2)
1,2,3-Trichloropropane	NE	ND	(5)	ND	ND	(25)	ND	ND	(25)	ND	ND	(5)
1,2-Dichlorobenzene	NE	ND	(0.5)	ND	ND	(2.5)	ND	ND	(2.5)	ND	ND	(0.5)
1,2-Dichloropropane	0.5	ND	(0.1)	ND	ND	(0.5)	ND	ND	(0.5)	ND	ND	(0.1)
1,3-Dichlorobenzene	5	ND	(0.1)	ND	ND	(0.5)	ND	ND	(0.5)	ND	ND	(0.1)
1,4-Dichlorobenzene	130	ND	(0.32)	ND	ND	(1.6)	ND	ND	(1.6)	ND	ND	(0.32)
1,4-Dichlorobenzene	5	ND	(0.24)	ND	ND	(1.2)	ND	ND	(1.2)	ND	ND	(0.24)
1-Chlorohexane	NE	ND	(5)	ND	ND	(25)	ND	ND	(25)	ND	ND	(5)
2-Chloroethylvinylether	NE	ND	(0.5)	ND	ND	(2.5)	ND	ND	(2.5)	ND	ND	(0.5)
Benzyl Chloride	NE	ND	(10)	ND	ND	(50)	ND	ND	(50)	ND	ND	(10)
Bromobenzene	NE	ND	(5)	ND	ND	(25)	ND	ND	(25)	ND	ND	(5)
Bromodichloromethane	100	ND	(0.1)	ND	ND	(0.5)	ND	ND	(0.5)	ND	ND	(0.1)
Bromoform	100	ND	(0.5)	ND	ND	(2.5)	ND	ND	(2.5)	ND	ND	(0.5)
Carbon Tetrachloride	NE	ND	(1.2)	ND	ND	(5.9)	ND	ND	(5.9)	ND	ND	(1.2)
Chlorobenzene	0.5	ND	(0.12)	ND	ND	(0.6)	ND	ND	(0.6)	ND	ND	(0.12)
Chloroethane	NE	ND	(0.25)	ND	ND	(1.3)	ND	ND	(1.3)	ND	ND	(0.25)
Chloroform	NE	ND	(0.52)	ND	ND	(2.6)	ND	ND	(2.6)	ND	ND	(0.52)
Chloromethane	100	0.83 C	(0.1)	ND	ND	(0.5)	0.67 (a)	ND	(0.5)	0.25 (a)	ND	(0.1)
Dibromochloromethane	NE	ND	(0.3)	ND	ND	(1.5)	ND	ND	(1.5)	ND	ND	(0.3)
Dibromomethane	100	ND	(0.2)	ND	ND	(1)	ND	ND	(1)	ND	ND	(0.2)
Dibromomethane	NE	ND	(5)	ND	ND	(25)	ND	ND	(25)	ND	ND	(5)

ALL UNITS ARE ug/L

AL = DHS Action Level  
EW = Extraction well  
I = Result differs from last issue of report  
NA = Not analyzed  
NS = Normal sample  
RAD = Radian Corporation, Sacramento  
U = Unconfirmed, second column not requested  
(a), (b), (c) = Result qualified due to one of the following analytical considerations  
(a) = Coelution  
(b) = Interference  
(c) = Random error  
B = Detected in blank, result not corrected  
FD = Field Duplicate  
MCL = DHS maximum contaminant level  
ND = Not detected at specified detection limit  
P = Previously confirmed  
RAS = Radian Analytical Services, Sacramento  
(2) = Result obtained from secondary column  
C = Confirmed on second column  
G = Exceeds calibration range  
MW = Monitoring well  
NE = Threshold value not established  
PMCL = US EPA primary maximum contaminant level

TABLE 1-11 (Continued)

Ground Water Zone Date Sampled Sampled by Date Analyzed Lab Field Analysis Lab Analysis	WELL NUMBER					
	MW-25D		MW-26D		MW-71	
	Middle	Middle	Middle	Middle	Middle	Middle
	31-Jan-90	31-Jan-90	31-Jan-90	31-Jan-90	02-Feb-90	02-Feb-90
	RAD	RAD	RAD	RAD	RAD	RAD
	04-Feb-90	04-Feb-90	04-Feb-90	05-Feb-90	06-Feb-90	06-Feb-90
	RAS	RAS	RAS	RAS	RAS	RAS
	NS	NS	NS	NS	NS	NS
	NS	NS	NS	NS	NS	NS

Analytes	Maximum Contaminant Level Or Action Level	Detection		Detection		Detection	
		Result	Limit	Result	Limit	Result	Limit
Methylene Chloride	NE	ND	(0.4)	ND	(2)	ND	(0.4)
Tetrachloroethene	5 MCL	ND	(0.1)	ND	(0.5)	ND	(0.1)
Total 1,2-Dichloroethene	16 AL	ND	(0.2)	ND	(1)	ND	(0.2)
Total Chlorotoluene	NE	ND	(25)	ND	(130)	ND	(25)
Trans-1,3-Dichloropropene	NE	ND	(0.34)	ND	(1.7)	ND	(0.34)
Trichloroethene	5 MCL	2.8 C	(0.2)	50 C	(1)	3.5 C	(0.2)
Trichlorofluoroethane	150 AL	ND	(0.2)	ND	(1)	ND	(0.2)
Vinyl Chloride	0.5 MCL	ND	(0.2)	ND	(1)	ND	(0.2)
bis(2-Chloroisopropyl) Ether	NE	ND	(10)	ND	(50)	ND	(10)
cis-1,3-Dichloropropene	NE	ND	(0.2)	ND	(1)	ND	(0.2)

ALL UNITS ARE ug/L

AL = DHS Action Level  
EW = Extraction well  
I = Result differs from last issue of report  
NA = Not analyzed  
NS = Normal sample  
RAD = Radian Corporation, Sacramento  
U = Unconfirmed, second column not requested  
(a), (b), (c) = Result qualified due to one of the following analytical considerations.  
(a) = Coalition  
(b) = Interference  
(c) = Random error

B = Detected in blank, result not corrected  
FD = Field Duplicate  
MCL = DHS maximum contaminant level  
ND = Not detected at specified detection limit  
P = Previously confirmed  
RAS = Radian Analytical Services, Sacramento  
(2) = Result obtained from secondary column  
(a), (b), (c) = Result qualified due to one of the following analytical considerations.  
(a) = Coalition  
(b) = Interference  
(c) = Random error

C = Confirmed on second column  
G = Exceeds calibration range  
MW = Monitoring well  
NE = Threshold value not established  
PMCL = US EPA primary maximum contaminant level

TABLE 1-12 MASTER LOG OF WELLS SAMPLED FOR METHOD 8020 FOR AREA A AND ADJACENT ON BASE AREAS,  
GROUNDWATER SAMPLING AND ANALYSIS PROGRAM,  
JANUARY TO MARCH 1990, MCCLELLAN AIR FORCE BASE

		WELL NUMBER	
Ground Water Zone		MW-71	
Date Sampled	Middle		
Sampled By	02-Feb-90		
Date Analyzed	RAD		
Lab	06-Feb-90		
Field Analysis	RAS		
Lab Analysis	NS		
	NS		
		Maximum Contaminant	
		Level Or Action Level	Detection Limit
Analytes		Result	
1,2-Dichlorobenzene	NE	ND	(0.4)
1,3-Dichlorobenzene	130	ND	(0.4)
1,4-Dichlorobenzene	5	ND	(0.3)
Benzene	1	ND	(0.2)
Chlorobenzene	30	ND	(0.2)
Ethylbenzene	680	ND	(0.2)
Toluene	NE	ND	(0.2)
Total Xylenes	1750	ND	(0.2)

ALL UNITS ARE ug/L

AL = DHS Action Level  
 EW = Extraction Well  
 I = Result differs from last issue of report  
 NA = Not analyzed  
 NS = Normal sample  
 RAD = Radian Corporation, Sacramento  
 U = Unconfirmed, second column not requested  
 (a),(b),(c) = Result qualified due to one of the following analytical considerations:  
 (a) = Coelution  
 (b) = Interference  
 (c) = Random error

B = Detected in blank, result not corrected  
 PD = Field Duplicate  
 MCL = DHS maximum contaminant level  
 ND = Not detected at specified detection limit  
 P = Previously confirmed  
 RAS = Radian Analytical Services, Sacramento  
 (2) = Result obtained from secondary column

C = Confirmed on second column  
 G = Exceeds calibration range  
 MW = Monitoring well  
 NE = Threshold value not established  
 PMCL = US. EPA primary maximum contaminant level

TABLE 1-13 MASTER LOG OF WELLS SAMPLED FOR METHOD 8010 FOR THE SOUTHEAST AREA,  
GROUNDWATER SAMPLING AND ANALYSIS PROGRAM,  
JANUARY TO MARCH 1990, MCLELLAN AIR FORCE BASE

Ground Water Zone	Date Sampled	Sampled By	Date Analyzed	Lab	Field Analysis	Lab Analysis	MW-28D			MW-1037			MW-1038			MW-1039		
							Middle	24-Jan-90	Shallow	19-Jan-90	Middle	21-Jan-90	Middle	19-Jan-90	Deep A	19-Jan-90	Deep A	19-Jan-90
							RAD		RAD		RAD		RAD		RAD		RAD	
							RAS		RAS		RAS		RAS		RAS		RAS	
							NS		NS		NS		NS		NS		NS	
							NS		NS		NS		NS		NS		NS	
Analytes	Maximum Contaminant Level Or Action Level	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result
1,1,1,2-Tetrachloroethane	NE	ND	(5)	ND	(5)	ND	(5)	ND	(5)	ND	(5)	ND	(5)	ND	(5)	ND	(5)	(5)
1,1,1-Trichloroethane	200	MCL	(0 2)	ND	(0 2)	ND	(0 2)	ND	(0 2)	ND	(0 2)	ND	(0 2)	ND	(0 2)	ND	(0 2)	(0 2)
1,1,2,2-Tetrachloroethane	1	MCL	(0 15)	ND	(0 15)	ND	(0 15)	ND	(0 15)	ND	(0 15)	ND	(0 15)	ND	(0 15)	ND	(0 15)	(0 15)
1,1,2,2-Trichloroethane	32	MCL	(0 2)	ND	(0 2)	ND	(0 2)	ND	(0 2)	ND	(0 2)	ND	(0 2)	ND	(0 2)	ND	(0 2)	(0 2)
1,1-Dichloroethane	NE	ND	(0 5)	ND	(0 5)	ND	(0 5)	ND	(0 5)	ND	(0 5)	ND	(0 5)	ND	(0 5)	ND	(0 5)	(0 5)
1,1-Dichloroethane	6	MCL	(0 2)	ND	(0 2)	ND	(0 2)	ND	(0 2)	ND	(0 2)	ND	(0 2)	ND	(0 2)	ND	(0 2)	(0 2)
1,2,3-Trichloropropane	NE	ND	(5)	ND	(5)	ND	(5)	ND	(5)	ND	(5)	ND	(5)	ND	(5)	ND	(5)	(5)
1,2-Dichlorobenzene	NE	ND	(0 5)	ND	(0 5)	ND	(0 5)	ND	(0 5)	ND	(0 5)	ND	(0 5)	ND	(0 5)	ND	(0 5)	(0 5)
1,2-Dichloroethane	0.5	MCL	(0 1)	ND	(0 1)	ND	(0 1)	ND	(0 1)	ND	(0 1)	ND	(0 1)	ND	(0 1)	ND	(0 1)	(0 1)
1,2-Dichloropropane	5	PMCL	(0 1)	ND	(0 1)	ND	(0 1)	ND	(0 1)	ND	(0 1)	ND	(0 1)	ND	(0 1)	ND	(0 1)	(0 1)
1,3-Dichlorobenzene	130	MCL	(0 32)	ND	(0 32)	ND	(0 32)	ND	(0 32)	ND	(0 32)	ND	(0 32)	ND	(0 32)	ND	(0 32)	(0 32)
1,4-Dichlorobenzene	5	MCL	(0 24)	ND	(0 24)	ND	(0 24)	ND	(0 24)	ND	(0 24)	ND	(0 24)	ND	(0 24)	ND	(0 24)	(0 24)
1-Chlorobenzene	NE	ND	(5)	ND	(5)	ND	(5)	ND	(5)	ND	(5)	ND	(5)	ND	(5)	ND	(5)	(5)
2-Chloroethylvinylether	NE	ND	(0 5)	ND	(0 5)	ND	(0 5)	ND	(0 5)	ND	(0 5)	ND	(0 5)	ND	(0 5)	ND	(0 5)	(0 5)
Benzyl Chloride	NE	ND	(10)	ND	(10)	ND	(10)	ND	(10)	ND	(10)	ND	(10)	ND	(10)	ND	(10)	(10)
Bromobenzene	NE	ND	(5)	ND	(5)	ND	(5)	ND	(5)	ND	(5)	ND	(5)	ND	(5)	ND	(5)	(5)
Bromodichloromethane	100	PMCL	(0 1)	ND	(0 1)	ND	(0 1)	ND	(0 1)	ND	(0 1)	ND	(0 1)	ND	(0 1)	ND	(0 1)	(0 1)
Bromoform	100	PMCL	(0 5)	ND	(0 5)	ND	(0 5)	ND	(0 5)	ND	(0 5)	ND	(0 5)	ND	(0 5)	ND	(0 5)	(0 5)
Bromoethane	NE	ND	(1 2)	ND	(1 2)	ND	(1 2)	ND	(1 2)	ND	(1 2)	ND	(1 2)	ND	(1 2)	ND	(1 2)	(1 2)
Carbon Tetrachloride	0 5	MCL	(0 12)	ND	(0 12)	ND	(0 12)	ND	(0 12)	ND	(0 12)	ND	(0 12)	ND	(0 12)	ND	(0 12)	(0 12)
Chlorobenzene	30	AL	(0 25)	ND	(0 25)	ND	(0 25)	ND	(0 25)	ND	(0 25)	ND	(0 25)	ND	(0 25)	ND	(0 25)	(0 25)
Chloroethane	NE	ND	(0 52)	ND	(0 52)	ND	(0 52)	ND	(0 52)	ND	(0 52)	ND	(0 52)	ND	(0 52)	ND	(0 52)	(0 52)
Chloroform	100	PMCL	(0 1)	ND	(0 1)	ND	(0 1)	ND	(0 1)	ND	(0 1)	ND	(0 1)	ND	(0 1)	ND	(0 1)	(0 1)
Chloromethane	NE	ND	(0 3)	ND	(0 3)	ND	(0 3)	ND	(0 3)	ND	(0 3)	ND	(0 3)	ND	(0 3)	ND	(0 3)	(0 3)
Dibromochloroethane	100	PMCL	(0 2)	ND	(0 2)	ND	(0 2)	ND	(0 2)	ND	(0 2)	ND	(0 2)	ND	(0 2)	ND	(0 2)	(0 2)
Dibromoethane	NE	ND	(5)	ND	(5)	ND	(5)	ND	(5)	ND	(5)	ND	(5)	ND	(5)	ND	(5)	(5)

ALL UNITS ARE ug/L

AL = DHS Action Level  
 EV = Extraction well  
 I = Result differs from last issue of report  
 NA = Not analyzed  
 NS = Normal sample  
 RAD = Radian Corporation, Sacramento  
 U = Unconfirmed, second column not requested  
 (a), (b), (c) = Result qualified due to one of the following analytical considerations:  
 (a) = Conclusion  
 (b) = Interference  
 (c) = Random error

B = Detected in blank, result not corrected  
 FL = Field Duplicate  
 MCL = DHS maximum contaminant level  
 ND = Not detected at specified detection limit  
 P = Previously confirmed  
 RAS = Radian Analytical Services, Sacramento  
 (2) = Result obtained from secondary column

C = Confirmed on second column  
 G = Exceeds calibration range  
 MW = Monitoring well  
 NE = Threshold value not established  
 PMCL = US EPA primary maximum contaminant level

TABLE 1-13 (Continued)

WELL NUMBER											
MW-28D				MW-1037				MW-1038			
Ground Water Zone				Middle				Shallow			
Date Sampled				24-Jan-90				19-Jan-90			
Sampled By				RAD				RAD			
Date Analyzed				25-Jan-90				21-Jan-90			
Lab				RAS				RAS			
Field Analysis				NS				NS			
Lab Analysis				NS				NS			
Maximum Contaminant Level Or Action Level				Detection Limit				Detection Limit			
Analytes				Result				Result			
Level Or Action Level				Limit				Limit			
Result				Limit				Limit			
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TABLE 1 14 (Continued )

		WELL NUMBER			
		MW-7	MW-23D	MW-41S	MW-63
Ground Water Zone		Shallow	Middle	Shallow	Deep A
Date Sampled		07-Feb-90	16-Jan-90	12-Jan-90	16-Jan-90
Sampled By		RAD	RAD	RAD	RAD
Date Analyzed		13-Feb-90	17-Jan-90	15-Jan-90	18-Jan-90
Lab		RAS	RAS	RAS	RAS
Field Analysis		NS	NS	NS	NS
Lab Analysis		NS	NS	NS	NS

Analytes	Maximum Contaminant Level Or Action Level	Detection		Detection		Detection		Detection	
		Result	Limit	Result	Limit	Result	Limit	Result	Limit
Methylene Chloride	NE	4.8 (b)	(4)	ND	(0.4)	ND	(40)	ND	(4)
Tetrachloroethene	5	ND	(1)	ND	(0.1)	ND	(10)	ND	(1)
Total 1,2-Dichloroethene	16	34 C	(2)	ND	(0.2)	ND	(20)	43 C	(2)
Total Chloroethene	NE	ND	(250)	ND	(25)	ND	(2500)	ND	(250)
Trans-1,3-Dichloropropene	NE	ND	(3.4)	ND	(0.34)	ND	(34)	ND	(3.4)
Trichloroethene	5	47. C	(2)	ND	(0.2)	1800 C	(20)	110 C	(2)
Trichlorofluoromethane	150	ND	(2)	ND	(0.2)	ND	(20)	ND	(2)
Vinyl Chloride	0.5	ND	(2)	ND	(0.2)	ND	(20)	ND	(2)
bis(2-Chloroisopropyl)Ether	NE	ND	(100)	ND	(10)	ND	(1000)	ND	(100)
cis-1,3-Dichloropropene	NE	ND	(2)	ND	(0.2)	ND	(20)	ND	(2)

ALL UNITS ARE ug/L

AL = DHS Action Level  
 EW = Extraction well  
 I = Result differs from last issue of report  
 NA = Not analyzed  
 NS = Normal sample  
 RAD = Radian Corporation, Sacramento  
 U = Unconfirmed, second column not requested  
 (a),(b),(c) = Result qualified due to one of the following analytical considerations.  
 (a) = Coelution  
 (b) = Interference  
 (c) = Random error

B = Detected in blank, result not corrected  
 FD = Field Duplicate  
 MCL = DHS maximum contaminant level  
 ND = Not detected at specified detection limit  
 P = Previously confirmed  
 RAS = Radian Analytical Services, Sacramento  
 (2) = Result obtained from secondary column  
 (a),(b),(c) = Result qualified due to one of the following analytical considerations.  
 (a) = Coelution  
 (b) = Interference  
 (c) = Random error

C = Confirmed on second column  
 G = Exceeds calibration range  
 MW = Monitoring well  
 NE = Threshold value not established  
 PMCL = US. EPA primary maximum contaminant level

TABLE 1-14 (Continued)

Ground Water Zone Date Sampled Sampled By Date Analyzed Lab Field Analysis Lab Analysis	Maximum Contaminant Level Or Action Level	MW-64				MW-65				MW-66				MW-121			
		Deep A 13-Feb-90 RAD 18-Feb-90 RAS NS NS	Shallow 28-Feb-90 RAD 01-Mar-90 RAS NS NS	Detection Limit	Result	Deep A 19-Feb-90 RAD 22-Feb-90 RAS NS NS	Shallow 28-Feb-90 RAD 01-Mar-90 RAS NS NS	Detection Limit	Result	Deep A 19-Feb-90 RAD 22-Feb-90 RAS NS NS	Shallow 28-Feb-90 RAD 01-Mar-90 RAS NS NS	Detection Limit	Result	Middle 15-Jan-90 RAD 16-Jan-90 RAS NS NS	Detection Limit	Result	Detection Limit
1,1,1,2-Tetrachloroethane	NE	ND	ND	(5)	ND	ND	ND	(50)	ND	ND	ND	(5)	ND	ND	(5)	ND	(5)
1,1,1-Trichloroethane	200	ND	ND	(0.2)	ND	ND	ND	(2)	ND	ND	ND	(0.2)	ND	0.47 C	(0.2)	ND	(0.2)
1,1,2,2-Tetrachloroethane	1	ND	ND	(0.15)	ND	ND	ND	(1.5)	ND	ND	ND	(0.15)	ND	ND	(0.15)	ND	(0.15)
1,1,2,2-Trichloroethane	12	ND	ND	(0.2)	ND	ND	ND	(2)	ND	ND	ND	(0.2)	ND	ND	(0.2)	ND	(0.2)
1,1-Dichloroethane		ND	ND	(0.5)	ND	ND	ND	(5)	ND	ND	ND	(0.5)	ND	ND	(0.5)	ND	(0.5)
1,1-Dichloroethane		ND	ND	(0.2)	ND	ND	ND	(2)	ND	ND	ND	(0.2)	ND	ND	(0.2)	ND	(0.2)
1,1,2,3-Trichloropropane		ND	ND	(5)	ND	ND	ND	(50)	ND	ND	ND	(5)	ND	ND	(5)	ND	(5)
1,2-Dichlorobenzene	NE	ND	ND	(0.5)	ND	ND	ND	(5)	ND	ND	ND	(0.5)	ND	ND	(0.5)	ND	(0.5)
1,2-Dichloroethane	0.5	ND	ND	(0.1)	ND	ND	ND	(1)	ND	ND	ND	(0.1)	ND	ND	(0.1)	ND	(0.1)
1,2-Dichloropropane	5	ND	ND	(0.1)	ND	ND	ND	(1)	ND	ND	ND	(0.1)	ND	ND	(0.1)	ND	(0.1)
1,3-Dichlorobenzene	130	ND	ND	(0.32)	ND	ND	ND	(3.2)	ND	ND	ND	(0.32)	ND	ND	(0.32)	ND	(0.32)
1,4-Dichlorobenzene	5	ND	ND	(0.24)	ND	ND	ND	(2.4)	ND	ND	ND	(0.24)	ND	ND	(0.24)	ND	(0.24)
1-Chlorobenzene	NE	ND	ND	(5)	ND	ND	ND	(50)	ND	ND	ND	(5)	ND	ND	(5)	ND	(5)
2-Chloroethylvinyl ether	NE	ND	ND	(0.5)	ND	ND	ND	(5)	ND	ND	ND	(0.5)	ND	ND	(0.5)	ND	(0.5)
Benzyl Chloride	NE	ND	ND	(10)	ND	ND	ND	(100)	ND	ND	ND	(10)	ND	ND	(10)	ND	(10)
Bromobenzene	NE	ND	ND	(5)	ND	ND	ND	(50)	ND	ND	ND	(5)	ND	ND	(5)	ND	(5)
Bromodichloromethane	100	ND	ND	(0.1)	ND	ND	ND	(1)	ND	ND	ND	(0.1)	ND	ND	(0.1)	ND	(0.1)
Bromoform	100	ND	ND	(0.5)	ND	ND	ND	(5)	ND	ND	ND	(0.5)	ND	ND	(0.5)	ND	(0.5)
Bromomethane	NE	ND	ND	(1.2)	ND	ND	ND	(12)	ND	ND	ND	(1.2)	ND	ND	(1.2)	ND	(1.2)
Carbon Tetrachloride	0.5	ND	ND	(0.12)	ND	ND	ND	(1.2)	ND	ND	ND	(0.12)	ND	ND	(0.12)	ND	(0.12)
Chlorobenzene	30	ND	ND	(0.25)	ND	ND	ND	(2.5)	ND	ND	ND	(0.25)	ND	ND	(0.25)	ND	(0.25)
Chloroethane	NE	ND	ND	(0.52)	ND	ND	ND	(5.2)	ND	ND	ND	(0.52)	ND	ND	(0.52)	ND	(0.52)
Chloroform	100	ND	ND	(0.1)	ND	ND	ND	(1)	ND	ND	ND	(0.1)	ND	ND	(0.1)	ND	(0.1)
Chloromethane	NE	ND	ND	(0.3)	ND	ND	ND	(3)	ND	ND	ND	(0.3)	ND	ND	(0.3)	ND	(0.3)
Dibromochloromethane	100	ND	ND	(0.2)	ND	ND	ND	(2)	ND	ND	ND	(0.2)	ND	ND	(0.2)	ND	(0.2)
Dibromomethane	NE	ND	ND	(5)	ND	ND	ND	(50)	ND	ND	ND	(5)	ND	ND	(5)	ND	(5)
Methylene Chloride	NE	ND	ND	(0.4)	ND	ND	ND	(4)	ND	ND	ND	(0.4)	ND	ND	(0.4)	ND	(0.4)

ALL UNITS ARE ug/L

AL = DHS Action Level  
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NA = Not analyzed  
NS = Normal sample  
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U = Unconfirmed, second column not requested  
(a), (b), (c) = Result qualified due to one of the following analytical considerations:  
(a) = Coelution  
(b) = Interference  
(c) = Random error  
B = Detected in blank, result not corrected  
FD = Field Duplicate  
MCL = DHS maximum contaminant level  
ND = Not detected at specified detection limit  
P = Previously confirmed  
RAS = Radian Analytical Services, Sacramento  
(2) = Result obtained from secondary column  
C = Confirmed on second column  
G = Exceeds calibration range  
MW = Monitoring well  
NE = Threshold value not established  
PMCL = US EPA primary maximum contaminant level

TABLE 1-14 (Continued)

		WELL NUMBER							
		MW-64		MW-65		MW-66		MW-121	
Ground Water Zone		Deep A		Shallow		Deep A		Middle	
Date Sampled		13-Feb-90		28-Feb-90		19-Feb-90		15-Jan-90	
Sampled By		RAD		RAD		RAD		RAD	
Date Analyzed		18-Feb-90		01-Mar-90		22-Feb-90		16-Jan-90	
Lab		RAS		RAS		RAS		RAS	
Field Analysis		NS		NS		NS		NS	
Lab Analysis		NS		NS		NS		NS	
-----									
Analytes	Maximum Contaminant Level Or Action	Contaminant	Detection		D-tetection		Detection		
			Result	Limit	Result	Limit	Result	Limit	
Tetrachloroethane	5	MCL	ND	(0.1)	ND, I	(1)	ND	(0.1)	ND (0.1)
Total 1,2-Dichloroethane	16	AL	ND	(0.2)	ND	(2)	ND	(0.2)	ND (0.2)
Total Chlorotoluene	NE		ND	(25)	ND	(250)	ND	(25)	ND (25)
Trans-1,3-Dichloropropene	NE		ND	(0.34)	ND	(3.4)	ND	(0.34)	ND (0.34)
Trichloroethane	5	MCL	ND	(0.2)	95	CI	ND	(0.2)	ND (0.2)
Trichlorofluoroethane	150	AL	HD	(0.2)	ND	(2)	ND	(0.2)	ND (0.2)
Vinyl Chloride	0.5	MCL	ND	(0.2)	ND	(100)	ND	(0.2)	ND (0.2)
bis(2-Chloroisopropyl)Ether	NE		ND	(10)	ND	(10)	ND	(10)	ND (10)
cis-1,3-Dichloropropene	NE		ND	(0.2)	HD	(2)	ND	(0.2)	ND (0.2)

TABLE 1-14 (Continued)

		WELL NUMBER					
		MW-132		MW-145		MW-146	
Ground Water Zone		Deep B		Middle		Deep A	
Date Sampled		17-Jan-90		25-Jan-90		06-Feb-90	
Sampled by		RAD		RAD		RAD	
Date Analyzed		19-Jan-90		28-Jan-90		08-Feb-90	
Lab		RAS		PAS		RAS	
Field Analysis		PD		NS		NS	
Lab Analysis		NS		NS		NS	
		MW-132		MW-145		MW-146	
		Deep B		Middle		Deep A	
		17-Jan-90		25-Jan-90		06-Feb-90	
		RAD		RAD		RAD	
		19-Jan-90		28-Jan-90		08-Feb-90	
		RAS		PAS		RAS	
		PD		NS		NS	
		NS		NS		NS	
		MW-132		MW-145		MW-146	
		Deep B		Middle		Deep A	
		17-Jan-90		25-Jan-90		06-Feb-90	
		RAD		RAD		RAD	
		19-Jan-90		28-Jan-90		08-Feb-90	
		RAS		PAS		RAS	
		PD		NS		NS	
		NS		NS		NS	
		MW-132		MW-145		MW-146	
		Deep B		Middle		Deep A	
		17-Jan-90		25-Jan-90		06-Feb-90	
		RAD		RAD		RAD	
		19-Jan-90		28-Jan-90		08-Feb-90	
		RAS		PAS		RAS	
		PD		NS		NS	
		NS		NS		NS	
		MW-132		MW-145		MW-146	
		Deep B		Middle		Deep A	
		17-Jan-90		25-Jan-90		06-Feb-90	
		RAD		RAD		RAD	
		19-Jan-90		28-Jan-90		08-Feb-90	
		RAS		PAS		RAS	
		PD		NS		NS	
		NS		NS		NS	
		MW-132		MW-145		MW-146	
		Deep B		Middle		Deep A	
		17-Jan-90		25-Jan-90		06-Feb-90	
		RAD		RAD		RAD	
		19-Jan-90		28-Jan-90		08-Feb-90	
		RAS		PAS		RAS	
		PD		NS		NS	
		NS		NS		NS	
		MW-132		MW-145		MW-146	
		Deep B		Middle		Deep A	
		17-Jan-90		25-Jan-90		06-Feb-90	
		RAD		RAD		RAD	
		19-Jan-90		28-Jan-90		08-Feb-90	
		RAS		PAS		RAS	
		PD		NS		NS	
		NS		NS		NS	
		MW-132		MW-145		MW-146	
		Deep B		Middle		Deep A	
		17-Jan-90		25-Jan-90		06-Feb-90	
		RAD		RAD		RAD	
		19-Jan-90		28-Jan-90		08-Feb-90	
		RAS		PAS		RAS	
		PD		NS		NS	
		NS		NS		NS	
		MW-132		MW-145		MW-146	
		Deep B		Middle		Deep A	
		17-Jan-90		25-Jan-90		06-Feb-90	
		RAD		RAD		RAD	
		19-Jan-90		28-Jan-90		08-Feb-90	
		RAS		PAS		RAS	
		PD		NS		NS	
		NS		NS		NS	
		MW-132		MW-145		MW-146	
		Deep B		Middle		Deep A	
		17-Jan-90		25-Jan-90		06-Feb-90	
		RAD		RAD		RAD	
		19-Jan-90		28-Jan-90		08-Feb-90	
		RAS		PAS		RAS	
		PD		NS		NS	
		NS		NS		NS	
		MW-132		MW-145		MW-146	
		Deep B		Middle		Deep A	
		17-Jan-90		25-Jan-90		06-Feb-90	
		RAD		RAD		RAD	
		19-Jan-90		28-Jan-90		08-Feb-90	
		RAS		PAS		RAS	
		PD		NS		NS	
		NS		NS		NS	
		MW-132		MW-145		MW-146	
		Deep B		Middle		Deep A	
		17-Jan-90		25-Jan-90		06-Feb-90	
		RAD		RAD		RAD	
		19-Jan-90		28-Jan-90		08-Feb-90	
		RAS		PAS		RAS	
		PD		NS		NS	
		NS		NS		NS	
		MW-132		MW-145		MW-146	
		Deep B		Middle		Deep A	
		17-Jan-90		25-Jan-90		06-Feb-90	
		RAD		RAD		RAD	
		19-Jan-90		28-Jan-90		08-Feb-90	
		RAS		PAS		RAS	
		PD		NS		NS	
		NS		NS		NS	
		MW-132		MW-145		MW-146	
		Deep B		Middle		Deep A	
		17-Jan-90		25-Jan-90		06-Feb-90	
		RAD		RAD		RAD	
		19-Jan-90		28-Jan-90		08-Feb-90	
		RAS		PAS		RAS	
		PD		NS		NS	
		NS		NS		NS	
		MW-132		MW-145		MW-146	
		Deep B		Middle		Deep A	
		17-Jan-90		25-Jan-90		06-Feb-90	
		RAD		RAD		RAD	

TABLE 1-14 (Continued)

	WELL NUMBER					
	MW-132	MW-132	MW-145	MW-146		
Ground Water Zone	Deep B	Deep B	Middle	Deep A		
Date Sampled	17-Jan-90	17-Jan-90	25-Jan-90	06-Feb-90		
Sampled By	RAD	RAD	RAD	RAD		
Date Analyzed	19-Jan-90	20-Jan-90	28-Jan-90	08-Feb-90		
Lab	RAS	RAS	RAS	RAS		
Field Analysis	FD	NS	NS	NS		
Lab Analysis	NS	NS	NS	NS		
<hr/>						
Analytes	Maximum Contaminant Level Or Action Level		Detection Limit		Detection Limit	
	Result	Result	Limit	Limit	Result	Limit
Tetrachloroethene	5 MCL	ND	(1)	(0.5)	ND	(0.1)
Total 1,2-Dichloroethene	16 AL	ND	(2)	(1)	0.51 C	(0.2)
Total Chlorotoluene	NE	ND	(250)	(130)	ND	(25)
Trans-1,3-Dichloropropene	NE	ND	(3.4)	(1.7)	ND	(0.34)
Trichloroethene	5 MCL	130. C	(2)	(1)	1.9 C	(0.2)
Trichlorofluoromethane	150 AL	ND	(2)	(1)	ND	(0.2)
Vinyl Chloride	0.5 MCL	ND	(2)	(1)	ND	(0.2)
bis(2-Chloroisopropyl) Ether	NE	ND	(100)	(50)	ND	(10)
cis-1,3-Dichloropropene	NE	ND	(2)	(1)	ND	(0.2)

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 (a) = Coelution  
 (b) = Interference  
 (c) = Random error

B = Detected in blank, result not corrected  
 FD = Field Duplicate  
 MCL = DHS maximum contaminant level  
 ND = Not detected at specified detection limit  
 P = Previously confirmed  
 RAS = Radian Analytical Services, Sacramento  
 (2) = Result obtained from secondary column

C = Confirmed on second column  
 G = Exceeds calibration range  
 MW = Monitoring well  
 NE = Threshold value not established  
 PMCL = US EPA primary maximum contaminant level

TABLE 1 14 (Continued)

Ground Water Zone Date Sampled Sampled By Date Analyzed Lab Field Analysis Lab Analysis	MW-147			MW-148			MW-149			MW-150		
	Deep B	06-Feb-90		Deep B	07-Feb-90		Deep B	07-Feb-90		Middle	22-Feb-90	
	RAD			RAD			RAD			RAD		
	RAS	08-Feb-90		RAS	12-Feb-90		RAS	12-Feb-90		RAS	24-Feb-90	
	NS			NS			NS			NS		
	NS			NS			NS			NS		
Analytes	Maximum Contaminant Level Or Action Level			Detection Limit			Detection Limit			Detection Limit		
	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit
1,1,1,2-Tetrachloroethane	NE		ND	(5)	ND	(5)	ND	(5)	ND	(5)	ND	(5)
1,1,1-Trichloroethane	200	MCL	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)
1,1,2,2-Tetrachloroethane	1	MCL	ND	(0.15)	ND	(0.15)	ND	(0.15)	ND	(0.15)	ND	(0.15)
1,1,2-Trichloroethane	32	MCL	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)
1,1-Dichloroethane	NE		ND	(0.5)	ND	(0.5)	ND	(0.5)	ND	(0.5)	ND	(0.5)
1,1-Dichloroethene	6	MCL	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)
1,1,2,3-Trichloropropane	NE		ND	(5)	ND	(5)	ND	(5)	ND	(5)	ND	(5)
1,2-Dichlorobenzene	NE		ND	(0.5)	ND	(0.5)	ND	(0.5)	ND	(0.5)	ND	(0.5)
1,2-Dichloroethane	0.5	MCL	ND	(0.1)	ND	(0.1)	ND	(0.1)	ND	(0.1)	ND	(0.1)
1,2-Dichloropropane	5	PMCL	ND	(0.1)	ND	(0.1)	ND	(0.1)	ND	(0.1)	ND	(0.1)
1,3-Dichlorobenzene	130	MCL	ND	(0.32)	ND	(0.32)	ND	(0.32)	ND	(0.32)	ND	(0.32)
1,4-Dichlorobenzene	5	MCL	ND	(0.24)	ND	(0.24)	ND	(0.24)	ND	(0.24)	ND	(0.24)
1-Chlorohexane	NE		ND	(5)	ND	(5)	ND	(5)	ND	(5)	ND	(5)
2-Chloroethylvinyl ether	NE		ND	(0.5)	ND	(0.5)	ND	(0.5)	ND	(0.5)	ND	(0.5)
Benzyl Chloride	NE		ND	(10)	ND	(10)	ND	(10)	ND	(10)	ND	(10)
Bromobenzene	NE		ND	(5)	ND	(5)	ND	(5)	ND	(5)	ND	(5)
Bromodichloromethane	100	PMCL	ND	(0.1)	ND	(0.1)	ND	(0.1)	ND	(0.1)	ND	(0.1)
Bromoform	100	PMCL	ND	(0.5)	ND	(0.5)	ND	(0.5)	ND	(0.5)	ND	(0.5)
Bromomethane	NE		ND	(1.2)	ND	(1.2)	ND	(1.2)	ND	(1.2)	ND	(1.2)
Carbon Tetrachloride	0.5	MCL	ND	(0.12)	ND	(0.12)	ND	(0.12)	ND	(0.12)	ND	(0.12)
Chlorobenzene	30	AL	ND	(0.25)	ND	(0.25)	ND	(0.25)	ND	(0.25)	ND	(0.25)
Chloroethane	NE		ND	(0.52)	ND	(0.52)	ND	(0.52)	ND	(0.52)	ND	(0.52)
Chloroform	100	PMCL	ND	(0.1)	ND	(0.1)	ND	(0.1)	ND	(0.1)	ND	(0.1)
Chloromethane	NE		ND	(0.3)	ND	(0.3)	ND	(0.3)	ND	(0.3)	ND	(0.3)
Dibromochloromethane	100	PMCL	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)
Dibromomethane	NE		ND	(5)	ND	(5)	ND	(5)	ND	(5)	ND	(5)
Methylene Chloride	NE		ND	(0.4)	ND	(0.4)	ND	(0.4)	ND	(0.4)	ND	(0.4)

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 (b) = Interference  
 (c) = Random error  
 B = Detected in blank, result not corrected  
 FD = Field Duplicate  
 MCL = DHS maximum contaminant level  
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 P = Previously confirmed  
 RAS = Radian Analytical Services, Sacramento  
 (2) = Result obtained from secondary column  
 C = Confirmed on second column  
 G = Exceeds calibration range  
 MW = Monitoring well  
 NE = Threshold value not established  
 PMCL = US EPA primary maximum contaminant level

TABLE 1-14 (Continued)

Ground Water Zone Date Sampled Sampled By Date Analyzed Lab Field Analysis Lab Analysis	WELL NUMBER											
	MW-147				MW-148				MW-149			
	Deep B 06-Feb-90 RAD 08-Feb-90 RAS NS NS	Deep B 07-Feb-90 RAD 12-Feb-90 RAS NS NS	Deep B 07-Feb-90 RAD 12-Feb-90 RAS NS NS	Deep B 07-Feb-90 RAD 12-Feb-90 RAS NS NS	Deep B 07-Feb-90 RAD 12-Feb-90 RAS NS NS	Deep B 07-Feb-90 RAD 12-Feb-90 RAS NS NS	Deep B 07-Feb-90 RAD 12-Feb-90 RAS NS NS	Deep B 07-Feb-90 RAD 12-Feb-90 RAS NS NS	Deep B 07-Feb-90 RAD 12-Feb-90 RAS NS NS	Deep B 07-Feb-90 RAD 12-Feb-90 RAS NS NS	Deep B 07-Feb-90 RAD 12-Feb-90 RAS NS NS	Deep B 07-Feb-90 RAD 12-Feb-90 RAS NS NS
Analytes	Maximum Contaminant Level Or Action Level	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit
Tetrachloroethane	5 MCL	(0.1)	ND	(0.1)	ND	(0.1)	ND	(0.1)	ND	(0.1)	ND	(0.1)
Total 1,2-Dichloroethane	16 AL	(0.2)	ND	(0.2)	2.5 C	(0.2)	2.5 C	(0.2)	ND	(0.2)	2.5 C	(0.2)
Total Chlorotoluene	NE	(25)	ND	(25)	ND	(25)	ND	(25)	ND	(25)	ND	(25)
Trans-1,3-Dichloropropene	NE	(0.34)	ND	(0.34)	ND	(0.34)	ND	(0.34)	ND	(0.34)	ND	(0.34)
Trichloroethane	5 MCL	(0.2)	ND	(0.2)	7.2 C	(0.2)	7.2 C	(0.2)	0.98 C	(0.2)	ND	(0.2)
Trichlorofluoromethane	150 AL	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)
Vinyl Chloride	0.5 MCL	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)
bis(2-Chloroisopropyl)Ether	NE	(10)	ND	(10)	ND	(10)	ND	(10)	ND	(10)	ND	(10)
cis-1,3-Dichloropropene	NE	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)

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 (c) = Random error

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 PD = Field Duplicate  
 MCL = DHS maximum contaminant level  
 ND = Not detected at specified detection limit  
 F = Previously confirmed  
 RAS = Radian Analytical Services, Sacramento  
 (2) = Result obtained from secondary column  
 (a),(b),(c) = Result qualified due to one of the following analytical considerations:  
 (a) = Coelution  
 (b) = Interference  
 (c) = Random error

C = Confirmed on second column  
 G = Exceeds calibration range  
 MW = Monitoring well  
 ME = Threshold value not established  
 PHCL = US EPA primary maximum contaminant level

TABLE 1-14 (Continued)

Ground Water Zone Sampled By Date Analyzed Lab Field Analysis Lab Analysis	MW-151			MW-152			MW-153		
	Deep A			Deep B			Middle		
	08-Feb-90			08-Feb-90			21-Feb-90		
	RAD			RAD			RAD		
	12-Feb-90			12-Feb-90			25-Feb-90		
	RAS			RAS			RAS		
	NS			NS			NS		
	NS			NS			NS		
Analytes	Maximum Contaminant Level Or Action Level			Detection			Detection		
	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Detection Limit
1,1,1,2-Tetrachloroethane	NE		ND	(5)	ND	(50)	ND	(50)	(50)
1,1,1-Trichloroethane	200	MCL	ND	(0.2)	ND	(0.2)	ND	(2)	(2)
1,1,2,2-Tetrachloroethane	1	MCL	ND	(0.15)	ND	(0.15)	ND	(1.5)	(1.5)
1,1,2-Trichloroethane	32	MCL	ND	(0.2)	ND	(0.2)	ND	(2)	(2)
1,1-Dichloroethane	NE		ND	(0.5)	ND	(0.5)	ND	(5)	(5)
1,1-Dichloroethane	6	MCL	ND	(0.2)	ND	(0.2)	ND	(2)	(2)
1,2,3-Trichloropropane	NE		ND	(5)	ND	(50)	ND	(50)	(50)
1,2-Dichlorobenzene	NE		ND	(0.5)	ND	(5)	ND	(5)	(5)
1,2-Dichloroethane	0.5	MCL	ND	(0.1)	ND	(0.1)	ND	(1)	(1)
1,2-Dichloropropane	5	PMCL	ND	(0.1)	ND	(0.1)	ND	(1)	(1)
1,3-Dichlorobenzene	130	MCL	ND	(0.32)	ND	(3.2)	ND	(3.2)	(3.2)
1,4-Dichlorobenzene	5	MCL	ND	(0.24)	ND	(2.4)	ND	(2.4)	(2.4)
1-Chlorohexane	NE		ND	(5)	ND	(50)	ND	(50)	(50)
2-Chloroethylvinyl ether	NE		ND	(0.5)	ND	(5)	ND	(5)	(5)
Benzyl Chloride	NE		ND	(10)	ND	(100)	ND	(100)	(100)
Bromobenzene	NE		ND	(5)	ND	(50)	ND	(50)	(50)
Bromodichloroethane	100	PMCL	ND	(0.1)	ND	(1)	ND	(1)	(1)
Bromoform	100	PMCL	ND	(0.5)	ND	(5)	ND	(5)	(5)
Bromomethane	NE		ND	(1.2)	ND	(12)	ND	(12)	(12)
Carbon Tetrachloride	0.5	MCL	ND	(0.12)	ND	(1.2)	ND	(1.2)	(1.2)
Chlorobenzene	30	AL	ND	(0.25)	ND	(2.5)	ND	(2.5)	(2.5)
Chloroethane	NE		ND	(0.52)	ND	(5.2)	ND	(5.2)	(5.2)
Chloroform	100	PMCL	ND	(0.1)	ND	(1)	ND	(1)	(1)
Chloromethane	NE		ND	(0.3)	ND	(3)	ND	(3)	(3)
Dibromochloroethane	100	PMCL	ND	(0.2)	ND	(2)	ND	(2)	(2)
Dibromomethane	NE		ND	(5)	ND	(50)	ND	(50)	(50)
Methylene Chloride	NE		ND	(0.4)	ND	(4)	ND	(4)	(4)

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 G = Exceeds calibration range  
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TABLE 1 14 (Continued)

		WELL NUMBER					
		MW-151		MW-152		MW-153	
Ground Water Zone		Deep A		Deep B		Middle	
Date Sampled		08-Feb-90		08-Feb-90		21-Feb-90	
Sampled By		RAD		RAD		RAD	
Date Analyzed		12-Feb-90		12-Feb-90		25-Feb-90	
Lab		RAS		RAS		RAS	
Field Analysis		NS		NS		NS	
Lab Analysis		NS		NS		NS	
		Maximum Contaminant Level Or Action Level		Detection Limit		Detection Limit	
Analytes		Result		Result		Result	
Tetrachloroethene	5 MCL	6.1 P	(0.1)	ND	(0.1)	6.5 C	(1)
Total 1,2-Dichloroethene	16 AL	ND	(0.2)	ND	(0.2)	3.5 C	(2)
Total Chlorotoluene	NE	ND	(25)	ND	(25)	ND	(250)
Trans-1,3-Dichloropropene	NE	ND	(0.34)	ND	(0.34)	ND	(3.4)
Trichloroethene	5 MCL	ND	(0.2)	ND	(0.2)	150. C	(2)
Trichlorofluoroethene	150 AL	ND	(0.2)	ND	(0.2)	ND	(2)
Vinyl Chloride	0.5 MCL	ND	(0.2)	ND	(0.2)	ND	(2)
bis(2-Chloroisopropyl)Ether	NE	ND	(10)	ND	(10)	ND	(100)
cis-1,3-Dichloropropene	NE	ND	(0.2)	ND	(0.2)	ND	(2)

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 (2) = Result obtained from secondary column

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 G = Exceeds calibration range  
 MW = Monitoring well  
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 PMCL = US EPA primary maximum contaminant level

TABLE 1 14 (Continued )

Ground Water Zone Sampled By Date Analyzed Lab Field Analysis Lab Analysis	MW-154			MW-155			MW-156			MW-157		
	Deep B	Shallow	Deep A	Shallow	Deep A	Shallow	Deep A	Shallow	Deep A	Shallow	Deep A	Shallow
	08-Feb-90	07-Feb-90	26-Feb-90	07-Feb-90	26-Feb-90	07-Feb-90	26-Feb-90	07-Feb-90	26-Feb-90	07-Feb-90	26-Feb-90	07-Feb-90
	RAD	RAD	RAD	RAD	RAD	RAD	RAD	RAD	RAD	RAD	RAD	RAD
	12-Feb-90	13-Feb-90	01-Mar-90	12-Feb-90	01-Mar-90	12-Feb-90	01-Mar-90	12-Feb-90	01-Mar-90	12-Feb-90	01-Mar-90	12-Feb-90
	RAS	RAS	RAS	RAS	RAS	RAS	RAS	RAS	RAS	RAS	RAS	RAS
	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Analytes	Maximum Contaminant Level Or Action Level			Detection Limit			Detection Limit			Detection Limit		
	Level	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result
1,1,1,2-Tetrachloroethane	NE	ND	(5)	ND	(5)	ND	(5)	ND	(5)	ND	(50)	ND
1,1,1-Trichloroethane	200	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(2)	ND
1,1,2,2-Tetrachloroethane	1	ND	(0.15)	ND	(0.15)	ND	(0.15)	ND	(0.15)	ND	(1.5)	ND
1,1,2-Trichloroethane	32	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(2)	ND
1,1-Dichloroethane	NE	ND	(0.5)	ND	(0.5)	ND	(0.5)	ND	(0.5)	ND	(5)	ND
1,1-Dichloroethane	6	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(2)	ND
1,2,3-Trichloropropane	NE	ND	(5)	ND	(5)	ND	(5)	ND	(5)	ND	(50)	ND
1,2-Dichlorobenzene	NE	ND	(0.5)	ND	(0.5)	ND	(0.5)	ND	(0.5)	ND	(5)	ND
1,2-Dichloroethane	0.5	ND	(6.1)	ND	(6.1)	ND	(6.1)	ND	(6.1)	ND	(1)	ND
1,2-Dichloropropane	5	ND	(0.1)	ND	(0.1)	ND	(0.1)	ND	(0.1)	ND	(1)	ND
1,3-Dichlorobenzene	130	ND	(0.32)	ND	(0.32)	ND	(0.32)	ND	(0.32)	ND	(3.2)	ND
1,4-Dichlorobenzene	5	ND	(0.24)	ND	(0.24)	ND	(0.24)	ND	(0.24)	ND	(2.4)	ND
1-Chlorohexane	NE	ND	(5)	ND	(5)	ND	(5)	ND	(5)	ND	(50)	ND
2-Chloroethylvinylether	NE	ND	(0.5)	ND	(0.5)	ND	(0.5)	ND	(0.5)	ND	(5)	ND
Benzyl Chloride	NE	ND	(10)	ND	(10)	ND	(10)	ND	(10)	ND	(100)	ND
Bromobenzene	NE	ND	(5)	ND	(5)	ND	(5)	ND	(5)	ND	(50)	ND
Bromodichloromethane	100	ND	(0.1)	ND	(0.1)	ND	(0.1)	ND	(0.1)	ND	(1)	ND
Bromoform	NE	ND	(0.5)	ND	(0.5)	ND	(0.5)	ND	(0.5)	ND	(5)	ND
Bromoethane	NE	ND	(1.2)	ND	(1.2)	ND	(1.2)	ND	(1.2)	ND	(12)	ND
Carbon Tetrachloride	0.5	ND	(0.12)	ND	(0.12)	ND	(0.12)	ND	(0.12)	ND	(1.2)	ND
Chlorobenzene	30	ND	(0.25)	ND	(0.25)	ND	(0.25)	ND	(0.25)	ND	(2.5)	ND
Chloroethane	NE	ND	(0.52)	ND	(0.52)	ND	(0.52)	ND	(0.52)	ND	(5.2)	ND
Chloroform	100	ND	(0.1)	ND	(0.1)	ND	(0.1)	ND	(0.1)	ND	(1)	ND
Chloromethane	NE	ND	(0.3)	ND	(0.3)	ND	(0.3)	ND	(0.3)	ND	(3)	ND
Dibromochloromethane	100	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(2)	ND
Dibromomethane	NE	ND	(5)	ND	(5)	ND	(5)	ND	(5)	ND	(50)	ND
Methylene Chloride	NE	ND	(0.4)	ND	(0.4)	ND	(0.4)	ND	(0.4)	ND	(4)	ND

ALL UNITS ARE ug/l.

AL = DHS Action Level  
 EW = Extraction well  
 I = Result differs from last issue of report  
 NA = Not analyzed  
 NS = Normal sample  
 RAD = Radian Corporation, Sacramento  
 U = Unconfirmed, second column not requested  
 (a), (b), (c) = Result qualified due to one of the following analytical considerations:  
 (a) = Coelution  
 (b) = Interference  
 (c) = Random error  
 B = Detected in blank, result not corrected  
 FD = Field Duplicate  
 MCL = DHS maximum contaminant level  
 ND = Not detected at specified detection limit  
 P = Previously confirmed  
 RAS = Radian Analytical Services, Sacramento  
 (2) = Result obtained from secondary column  
 C = Confirmed on second column  
 G = Exceeds calibration range  
 MW = Monitoring well  
 NE = Threshold value not established  
 PMCL = US EPA primary maximum contaminant level

TABLE 1-14 (Continued)

	WELL NUMBER					
	MW-154	MW-155	MW-156	MW-157		
Ground Water Zone	Deep B	Shallow	Deep A	Shallow		
Date Sampled	08-Feb-90	07-Feb-90	26-Feb-90	19-Feb-90		
Sampled By	RAD	RAD	RAD	RAD		
Date Analyzed	12-Feb-90	13-Feb-90	01-Mar-90	23-Feb-90		
Lab	RAS	RAS	RAS	RAS		
Field Analysis	NS	NS	NS	NS		
Lab Analysis	NS	NS	NS	NS		
Analytes	Maximum Contaminant Level Or Action Level		Detection Limit		Detection Limit	
	Result	Result	Limit	Limit	Result	Limit
Tetrachloroethene	5 MCL	ND	(0.1)	(0.1)	ND	(1)
Total 1,2-Dichloroethane	16 AL	ND	(0.2)	(0.2)	52 IC	(2)
Total Chloroethene	NE	ND	(25)	(25)	ND	(100)
Trans-1,3-Dichloropropene	NE	ND	(0.34)	(0.34)	ND	(13000)
Trichloroethene	5 MCL	ND	(0.2)	(0.2)	ND	(250)
Trichlorofluoromethane	150 AL	0.83 C	(0.2)	(0.2)	100 IC	(3 4)
Vinyl Chloride	0.5 MCL	ND	(0.2)	(0.2)	ND	(2)
bis(2-Chloroisopropyl)Ether	NE	ND	(10)	(10)	ND	(2)
cis-1,3-Dichloropropene	NE	ND	(0.2)	(0.2)	ND	(100)
					ND	(5000)
					ND	(100)

ALL UNITS ARE ug/l.

AL = DBS Action Level  
 EW = Extraction well  
 I = Result differs from last issue of report  
 NA = Not analyzed  
 NS = Normal sample  
 RAD = Radian Corporation, Sacramento  
 U = Unconfirmed, second column not requested  
 (a), (b), (c) = Result qualified due to one of the following analytical considerations.  
 (a) = Coelution  
 (b) = Interference  
 (c) = Random error

B = Detected in blank, result not corrected  
 PD = Field Duplicate  
 MCL = DBS maximum contaminant level  
 ND = Not detected at specified detection limit  
 P = Previously confirmed  
 RAS = Radian Analytical Services, Sacramento  
 (2) = Result obtained from secondary column

C = Confirmed on second column  
 G = Exceeds calibration range  
 MW = Monitoring well  
 NE = Threshold value not established  
 PMCL = US. EPA primary maximum contaminant level

TABLE 1-14 (Continued)

WELL NUMBER

MW-158

 Ground Water Zone  
 Date Sampled  
 Sampled By  
 Date Analyzed  
 Lab  
 Field Analysis  
 Lab Analysis

 Shallow  
 13-Feb-90  
 RAD  
 19-Feb-90  
 RAS  
 MS  
 MS

Analytes

 Maximum Contaminant  
 Level Or Action Level

 Detection  
 Limit

1,1,1,2-Tetrachloroethane	NE	ND	(250)
1,1,1-Trichloroethane	200	29. C	(10)
1,1,2,2-Tetrachloroethane	1	ND	(7.5)
1,1,2-Trichloroethane	32	ND	(10)
1,1-Dichloroethane	NE	ND	(25)
1,1-Dichloroethane	6	ND	(10)
1,2,3-Trichloropropane	NE	ND	(250)
1,2-Dichlorobenzene	NE	ND	(25)
1,2-Dichloroethane	0.5	ND	(5)
1,2-Dichloropropane	5	ND	(5)
1,3-Dichlorobenzene	130	ND	(16)
1,4-Dichlorobenzene	5	ND	(12)
1-Chlorohexane	NE	ND	(250)
2-Chloroethylvinyl ether	NE	ND	(25)
Benzyl Chloride	NE	ND	(500)
Bromobenzene	NE	ND	(250)
Bromodichloroethane	100	ND	(5)
Bromoform	100	ND	(25)
Bromoethane	NE	ND	(59)
Carbon Tetrachloride	0.5	ND	(6)
Chlorobenzene	30	ND	(13)
Chloroethane	NE	ND	(26)
Chloroform	100	ND	(5)
Chloromethane	NE	ND	(15)
Dibromochloroethane	100	ND	(10)
Dibromoethane	NE	ND	(250)
Methylene Chloride	NE	22 C	(20)

ALL UNITS ARE ug/L

AL = DHS Action Level  
 EW = Extraction Well  
 I = Result differs from last issue of report  
 MA = Not analyzed  
 NS = Normal sample  
 RAD = Radian Corporation, Sacramento  
 U = Unconfirmed second column not requested  
 (a), (b), (c) = Result qualified due to one of the following analytical considerations:  
 (a) = Coelution  
 (b) = Interference

B = Detected in blank, result not corrected  
 FD = Field Duplicate  
 MCL = DHS maximum contaminant level  
 ND = Not detected at specified detection limit  
 P = Previously confirmed  
 RAS = Radian Analytical Services, Sacramento  
 (2) = Result obtained from secondary column  
 following analytical considerations.  
 (b) = Interference

C = Confirmed on second column  
 G = Exceeds calibration range  
 MW = Monitoring well  
 NE = Threshold value not established  
 PMCL = US EPA primary maximum contaminant level

(c) = Random error

TABLE 1-14 (Continued)

WELL NUMBER

MW-158

Ground Water Zone

Date Sampled 13-Feb-90

Sampled By RAD

Date Analyzed 19-Feb-90

Lab RAS

Field Analysis NS

Lab Analysis MS

Analytes	Maximum Contaminant Level Or Action Level		Detection Limit	
	Level	Result	Result	Limit
Tetrachloroethene	5	MCL	210. C	(5)
Total 1,2-Dichloroethene	16	AL	42. C	(10)
Total Chlorotoluene	NE		ND	(1300)
Trans-1,3-Dichloropropene	NE		ND	(17)
Trichloroethene	5	MCL	1500. C	(10)
Trichlorofluoroethane	150	A'	ND	(10)
Vinyl Chloride	0.5	MCL	ND	(10)
bin(2-Chloroisopropyl) Ether	NE		ND	(500)
cis-1,3-Dichloropropene	NE		ND	(10)

ALL UNITS ARE ug/L

AL = DHS Action Level

EW = Extraction well

I = Result differs from last issue of report

NA = Not analyzed

NS = Normal sample

RAD = Radian Corporation, Sacramento

U = Unconfirmed, second column not requested

(a), (b), (c) = Result qualified due to one of the following analytical considerations.

(a) = Coelution

(b) = Interference

(c) = Random error

B = Detected in blank, result not corrected

FD = Field Duplicate

MCL = DHS maximum contaminant level

ND = Not detected at specified detection limit

P = Previously confirmed

RAS = Radian Analytical Services, Sacramento

(2) = Result obtained from secondary column

(2) = Result obtained from secondary column

(b) = Interference

(b) = Interference

(b) = Interference

C = Confirmed on second column

G = Exceeds calibration range

MW = Monitoring well

NE = Threshold value not established

PMCL = US. EPA primary maximum contaminant level

(c) = Random error

(c) = Random error

(c) = Random error

TABLE 1-15 MASTER LOG OF WELLS SAMPLED FOR METHOD 8020 FOR AREA B AND ADJACENT ON-BASE AREAS,  
GROUNDWATER SAMPLING AND ANALYSIS PROGRAM,  
JANUARY TO MARCH 1990, MCCLELLAN AIR FORCE BASE

Ground Water Zone Date Sampled Sampled By Date Analyzed Lab Field Analysis Lab Analysis	MW-66			MW-145			MW-146			MW-147		
	Deep A	19-Feb-90	Deep A	Middle	25-Jan-90	Deep A	06-Feb-90	Deep B	06-Feb-90	Deep B	06-Feb-90	Deep B
	RAD		RAD	RAD		RAD		RAD		RAD		RAD
	22-Feb-90		28-Jan-90			08-Feb-90		08-Feb-90		08-Feb-90		08-Feb-90
	RAS		RAS			RAS		RAS		RAS		RAS
	NS		NS			NS		NS		NS		NS
	NS		NS			NS		NS		NS		NS
Analytes	MW-66			MW-145			MW-146			MW-147		
	Maximum Contaminant Level Or Action Level	Detection Limit	Result	Detection Limit	Result	Detection Limit	Detection Limit	Result	Detection Limit	Result	Detection Limit	Detection Limit
1,2-Dichlorobenzene	NE	(0.4)	ND	(0.4)	ND	(0.4)	(0.4)	ND	(0.4)	ND	(0.4)	(0.4)
1,3-Dichlorobenzene	130	(0.4)	ND	(0.4)	ND	(0.4)	(0.4)	ND	(0.4)	ND	(0.4)	(0.4)
1,4-Dichlorobenzene	5	(0.3)	ND	(0.3)	ND	(0.3)	(0.3)	ND	(0.3)	ND	(0.3)	(0.3)
Benzene	1	(0.2)	ND	(0.2)	ND	(0.2)	(0.2)	ND	(0.2)	ND	(0.2)	(0.2)
Chlorobenzene	30	(0.2)	ND	(0.2)	ND	(0.2)	(0.2)	ND	(0.2)	ND	(0.2)	(0.2)
Ethylbenzene	680	(0.2)	ND	(0.2)	ND	(0.2)	(0.2)	ND	(0.2)	ND	(0.2)	(0.2)
Toluene	NE	(0.2)	ND	(0.2)	ND	(0.2)	(0.2)	ND	(0.2)	ND	(0.2)	(0.2)
Total Xylenes	1750	(0.2)	ND	(0.2)	ND	(0.2)	(0.2)	ND	(0.2)	ND	(0.2)	(0.2)

ALL UNITS ARE ug/L

AL = DHS Action Level  
EW = Extraction well  
I = Result differs from last issue of report  
NA = Not analyzed  
NS = Normal sample  
RAD = Radian Corporation, Sacramento  
U = Unconfirmed, second column not requested  
(a), (b), (c) = Result qualified due to one of the following analytical considerations.  
(a) = Coelution  
(b) = Interference  
(c) = Random error

B = Detected in blank, result not corrected  
FD = Field Duplicate  
MCL = DHS maximum contaminant level  
ND = Not detected at specified detection limit  
P = Previously confirmed  
RAS = Radian Analytical Services, Sacramento  
(2) = Result obtained from secondary column

C = Confirmed on second column  
G = Exceeds calibration range  
MW = Monitoring well  
NE = Threshold value not established  
PMCL = US EPA primary maximum contaminant level

TABLE 1-15 (Continued)

		WELL NUMBER			
		MW-148	MW-149	MW-151	MW-152
Ground Water Zone		Deep B	Deep B	Deep A	Deep B
Date Sampled		07-Feb-90	07-Feb-90	08-Feb-90	08-Feb-90
Sampled by		RAD	RAD	RAD	RAD
Date Analyzed		12-Feb-90	12-Feb-90	12-Feb-90	12-Feb-90
Lab		RAS	RAS	RAS	RAS
Field Analysis		NS	NS	NS	NS
Lab Analysis		NS	NS	NS	NS
Maximum Contaminant Level Or Action Level		Detection Limit		Detection Limit	
Analyte	Level Or Action Level	Result	Limit	Result	Limit
1,2-Dichlorobenzene	NS	ND	(0.4)	ND	(0.4)
1,3-Dichlorobenzene	130	ND	(0.4)	ND	(0.4)
1,4-Dichlorobenzene	5	ND	(0.3)	ND	(0.3)
Benzene	1	ND	(0.2)	ND	(0.2)
Chlorobenzene	30	ND	(0.2)	ND	(0.2)
Cyhalothrin	680	ND	(0.2)	ND	(0.2)
Toluene	NE	ND	(0.2)	ND	(0.2)
Total Xylenes	1750	ND	(0.2)	ND	(0.2)
ALL UNITS ARE ug/L					
AL	= DHS Action Level				
EW	= Extraction well				
I	= Result differs from last issue of report				
NA	= Not analyzed				
NS	= Formal sample				
RAD	= Radian Corporation, Sacramento				
U	= Unconfirmed, second column not requested				
(a), (b), (c)	= Result qualified due to one of the following analytical considerations:				
(A)	= Coelution				
(B)	= Interference				
(C)	= Detected in blank, result not corrected				
(D)	= Field Duplicate				
(E)	= DHS maximum contaminant level				
(F)	= Not detected at specified detection limit				
(G)	= Previously confirmed				
(H)	= Radian Analytical Services, Sacramento				
(I)	= Result obtained from secondary column				
(J)	= Result qualified due to one of the following analytical considerations:				
(K)	= Confirmed on second column				
(L)	= Exceeds calibration range				
(M)	= Monitoring well				
(N)	= Threshold value not established				
(O)	= US EPA primary maximum contaminant level				
(P)	= Random error				

TABLE 4-15 (Continued)

Ground Water Zone Date Sampled Sampled By Date Analyzed Lab Field Analysis Lab Analysis	MW-153		MW-154	
	Middle 21-Feb-90 RAD 25-Feb-90 RAS NS NS	Middle 21-Feb-90 RAD 25-Feb-90 RAS FD NS	Deep B 08-Feb-90 RAD 12-Feb-90 RAS NS NS	
Analytes	Maximum Contaminant Level Or Action Level	Detection Limit	Detection Limit	Detection Limit
1,2-Dichlorobenzene	NE	ND	ND	ND
1,3-Dichlorobenzene	130 MCL	ND	ND	ND
1,4-Dichlorobenzene	5 MCL	ND	ND	ND
Benzene	1 MCL	ND	ND	ND
Chlorobenzene	30 AL	ND	ND	ND
Ethylbenzene	680 MCL	ND	ND	ND
Toluene	NE	ND	ND	ND
Total Xylenes	1750 MCL	ND	ND	ND

ALL UNITS ARE ug/L

AL = DHS Action Level  
 EW = Extraction well  
 I = Result differs from last issue of report  
 NA = Not analyzed  
 NS = Normal sample  
 RAD = Radian Corporation, Sacramento  
 U = Unconfirmed, second column not requested  
 (a), (b), (c) = Result qualified due to one of the following analytical considerations:  
 (a) = Coelution  
 (b) = Interference  
 (c) = Random error  
 B = Detected in blank, result not corrected  
 FD = Field Duplicate  
 MCL = DHS maximum contaminant level  
 ND = Not detected at specified detection limit  
 P = Previously confirmed  
 RAS = Radian Analytical Services, Sacramento  
 (2) = Result obtained from secondary column  
 C = Confirmed on second column  
 G = Exceeds calibration range  
 MW = Monitoring well  
 NE = Threshold value not established  
 PMCL = US. EPA primary maximum contaminant level



TABLE 1-16. MASTER LOG OF WELLS SAMPLED FOR METHOD 8240 FOR AREA B AND ADJACENT ON-BASE AREAS,  
GROUNDWATER SAMPLING AND ANALYSIS PROGRAM,  
JANUARY TO MARCH 1990, MCCELLELLAN AIR FORCE BASE

WELL NUMBER

MW-150

Ground Water Zone

Middle

Date Sampled

22-Feb-90

Sampled By

RAD

Date Analyzed

05-Mar-90

Lab

RAS

Field Analysis

NS

Lab Analysis

NS

Analytes

Maximum Contaminant  
Level Or Action Level

Result

Detection  
Limit

1,1,1-Trichloroethane	200 MCL	ND	(3.8)
1,1,2,2-Tetrachloroethane	1 MCL	ND	(5)
1,1,2,2-Trichloroethane	32 MCL	ND	(5)
1,1-Dichloroethane	NE	ND	(4.7)
1,1-Dichloroethene	6 MCL	ND	(2.8)
1,2-Dichloroethane	0.5 MCL	ND	(2.8)
1,2-Dichloropropane	5 PMCL	ND	(5)
2-Butanone	NE	ND	(10)
2-Chloroethylethyl ether	NE	ND	(10)
2-Hexanone	NE	ND	(10)
4-Methyl-2-Pentanone	NE	ND	(10)
Acetone	NE	16.	(10)
Benzene	1 MCL	ND	(4.4)
Bromodichloromethane	100 PMCL	ND	(3.5)
Bromoform	100 PMCL	ND	(4.7)
Bromomethane	NE	ND	(5)
Carbon Disulfide	NE	ND	(5)
Carbon Tetrachloride	0.5 MCL	ND	(2.8)
Chlorobenzene	30 AL	ND	(5)
Chloroethane	NE	ND	(5)
Chloroform	100 PMCL	ND	(2.5)
Chloromethane	NE	ND	(5)
Dibromochloromethane	100 PMCL	ND	(3.1)
Ethylbenzene	680 MCL	ND	(5)
Methylene Chloride	NE	6.8 B	(5)
Styrene	NE	ND	(5)

ALL UNITS ARE ug/L

AL = DHS Action Level

EW = Extraction well

I = Result differs from last issue of report

NA = Not analyzed

NS = Normal sample

RAD = Radian Corporation, Sacramento

U = Unconfirmed, second column not requested

B

= Detected in blank, result not corrected

FD

= Field Duplicate

MCL

= DHS maximum contaminant level

ND

= Not detected at specified detection limit

P

= Previously confirmed

RAS

= Radian Analytical Services, Sacramento

C

= Confirmed on second column

G

= Exceeds calibration range

MW

= Monitoring well

NE

= Threshold value not established

PMCL

= US EPA primary maximum contaminant level

TABLE 1-16 (Continued)

WELL NUMBER

MW-150

Ground Water Zone Middle  
Date Sampled 22-Feb-90  
Sampled By RAD  
Date Analyzed 05-Mar-90  
Lab RAS  
Field Analysis NS  
Lab Analysis NS

Analytes	Maximum Contaminant Level Or Action Level		Result	Detection Limit	
	Level	Or Action Level		Result	Limit
Tetrachloroethene	5	MCL	ND	ND	(4.1)
Toluene	NE		ND	ND	(5)
Total Xylenes	1750	MCL	ND	ND	(5)
Trans-1,3-Dichloropropene	NE		ND	ND	(5)
Trichloroethene	5	MCL	ND	ND	(2.5)
Vinyl Acetate	NE		ND	ND	(6.9)
Vinyl Chloride	0.5	MCL	ND	ND	(5)
cis-1,3-Dichloropropene	NE		ND	ND	(5)
trans-1,2-Dichloroethene	NE		ND	ND	(5)

ALL UNITS ARE ug/L

AL = DHS Action Level  
EW = Extraction well  
I = Result differs from last issue of report  
NA = Not analyzed  
NS = Normal sample  
RAD = Radian Corporation, Sacramento  
U = Unconfirmed, second column not requested

B = Detected in blank, result not corrected  
FD = Field Duplicate  
MCL = DHS maximum contaminant level  
ND = Not detected at specified detection limit  
P = Previously confirmed  
RAS = Radian Analytical Services, Sacramento

C = Confirmed on second column  
G = Exceeds calibration range  
MW = Monitoring well  
NE = Threshold value not established  
PMCL = US EPA primary maximum contaminant level

TABLE 1-17 MASTER LOG OF WELLS SAMPLED FOR METHOD 6010 FOR AREA B AND ADJACENT ON-BASE AREAS,  
GROUNDWATER SAMPLING AND ANALYSIS PROGRAM,  
JANUARY TO MARCH 1990, MCLELLAN AIR FORCE BASE

		MW-66		MW-147	
Ground Water Zone		Deep A		Deep B	
Date Sampled		19-Feb-90		06-Feb-90	
Sampled By		RAD		RAD	
Date Analyzed		01-Mar-90		20-Feb-90	
Lab		RAS		RAS	
Field Analysis		NS		NS	
Lab Analysis		NS		NS	
		MW-66		MW-147	
		Deep A		Deep B	
		19-Feb-90		06-Feb-90	
		RAD		RAD	
		01-Mar-90		20-Feb-90	
		RAS		RAS	
		NS		NS	
		NS		NS	
		MW-66		MW-147	
		Deep A		Deep B	
		19-Feb-90		06-Feb-90	
		RAD		RAD	
		01-Mar-90		20-Feb-90	
		RAS		RAS	
		NS		NS	
		NS		NS	
		MW-66		MW-147	
		Deep A		Deep B	
		19-Feb-90		06-Feb-90	
		RAD		RAD	
		01-Mar-90		20-Feb-90	
		RAS		RAS	
		NS		NS	
		NS		NS	
		MW-66		MW-147	
		Deep A		Deep B	
		19-Feb-90		06-Feb-90	
		RAD		RAD	
		01-Mar-90		20-Feb-90	
		RAS		RAS	
		NS		NS	
		NS		NS	
		MW-66		MW-147	
		Deep A		Deep B	
		19-Feb-90		06-Feb-90	
		RAD		RAD	
		01-Mar-90		20-Feb-90	
		RAS		RAS	
		NS		NS	
		NS		NS	
		MW-66		MW-147	
		Deep A		Deep B	
		19-Feb-90		06-Feb-90	
		RAD		RAD	
		01-Mar-90		20-Feb-90	
		RAS		RAS	
		NS		NS	
		NS		NS	
		MW-66		MW-147	
		Deep A		Deep B	
		19-Feb-90		06-Feb-90	
		RAD		RAD	
		01-Mar-90		20-Feb-90	
		RAS		RAS	
		NS		NS	
		NS		NS	
		MW-66		MW-147	
		Deep A		Deep B	
		19-Feb-90		06-Feb-90	
		RAD		RAD	
		01-Mar-90		20-Feb-90	
		RAS		RAS	
		NS		NS	
		NS		NS	
		MW-66		MW-147	
		Deep A		Deep B	
		19-Feb-90		06-Feb-90	
		RAD		RAD	
		01-Mar-90		20-Feb-90	
		RAS		RAS	
		NS		NS	
		NS		NS	
		MW-66		MW-147	
		Deep A		Deep B	
		19-Feb-90		06-Feb-90	
		RAD		RAD	
		01-Mar-90		20-Feb-90	
		RAS		RAS	
		NS		NS	
		NS		NS	
		MW-66		MW-147	
		Deep A		Deep B	
		19-Feb-90		06-Feb-90	
		RAD		RAD	
		01-Mar-90		20-Feb-90	
		RAS		RAS	
		NS		NS	
		NS		NS	
		MW-66		MW-147	
		Deep A		Deep B	
		19-Feb-90		06-Feb-90	
		RAD		RAD	
		01-Mar-90		20-Feb-90	
		RAS		RAS	
		NS		NS	
		NS		NS	
		MW-66		MW-147	
		Deep A		Deep B	
		19-Feb-90		06-Feb-90	
		RAD		RAD	
		01-Mar-90		20-Feb-90	
		RAS		RAS	
		NS		NS	
		NS		NS	
		MW-66		MW-147	
		Deep A		Deep B	
		19-Feb-90		06-Feb-90	
		RAD		RAD	
		01-Mar-90		20-Feb-90	
		RAS		RAS	
		NS		NS	
		NS		NS	
		MW-66		MW-147	
		Deep A		Deep B	
		19-Feb-90		06-Feb-90	
		RAD		RAD	
		01-Mar-90		20-Feb-90	
		RAS		RAS	
		NS		NS	
		NS		NS	
		MW-66		MW-147	
		Deep A		Deep B	
		19-Feb-90		06-Feb-90	
		RAD		RAD	
		01-Mar-90		20-Feb-90	
		RAS		RAS	
		NS		NS	
		NS		NS	
		MW-66		MW-147	
		Deep A		Deep B	
		19-Feb-90		06-Feb-90	
		RAD		RAD	
		01-Mar-90		20-Feb-90	
		RAS		RAS	
		NS		NS	
		NS		NS	
		MW-66		MW-147	
		Deep A		Deep B	
		19-Feb-90		06-Feb-90	
		RAD		RAD	
		01-Mar-90		20-Feb-90	
		RAS		RAS	
		NS		NS	
		NS		NS	
		MW-66		MW-147	
		Deep A		Deep B	

TABLE 1-18. MASTER LOG OF WELLS SAMPLED FOR METHOD 7196 FOR AREA B AND ADJACENT ON-BASE AREAS,  
GROUNDWATER SAMPLING AND ANALYSIS PROGRAM,  
JANUARY TO MARCH 1990, McCLELLAN AIR FORCE BASE

WELL NUMBER			
MW-147			
Ground Water Zone	Deep B		
Date Sampled	06-Feb-90		
Sampled By	RAD		
Date Analyzed	07-Feb-90		
Lab	RAS		
Field Analysis	NS		
Lab Analysis	NS		
-----			
Analytes	Maximum Contaminant	Detection	
	Level Or Action Level	Result	Limit
Chromium, Hexavalent	50	PMCL	ND (0.02)

ALL UNITS ARE mg/L

AL	=	DHS Action Level	B	=	Detected in blank, result not corrected	C	=	Confirmed on second column
EW	=	Extraction well	PD	=	Field Duplicate	G	=	Exceeds calibration range
I	=	Result differs from last issue of report	MCL	=	DHS maximum contaminant level	MW	=	Monitoring well
NA	=	Not analyzed	ND	=	Not detected at specified detection limit	NE	=	Threshold value not established
NS	=	Normal sample	P	=	Previously confirmed	PHCL	=	US EPA primary maximum contaminant level
RAD	=	Radian Corporation, Sacramento	RAS	=	Radian Analytical Services, Sacramento	S	=	Determined by method of standard addition
U	=	Unconfirmed, second column not requested						

TABLE 1-19 MASTER LOG OF WELLS SAMPLED FOR METHOD 8010 FOR THE SOUTHWEST AREA,  
GROUNDWATER SAMPLING AND ANALYSIS PROGRAM,  
JANUARY TO MARCH 1990, MCCLELLAN AIR FORCE BASE

Ground Water Zone Date Sampled Sampled By Date Analyzed Lab Field Analysis Lab Analysis	MW-1000			MW-1015			MW-1016			MW-1020		
	Middle			Middle			Shallow			Shallow		
	19-Feb-90	22-Feb-90	NS	26-Jan-90	31-Jan-90	NS	26-Jan-90	31-Jan-90	NS	01-Feb-90	11-Feb-90	NS
Maximum Contaminant Level Or Action Level	Result			Result			Result			Result		
	Detection Limit	Detection Limit	Detection Limit	Detection Limit	Detection Limit	Detection Limit	Detection Limit	Detection Limit	Detection Limit	Detection Limit	Detection Limit	Detection Limit
Analytes	Result	Limit	Limit	Result	Limit	Limit	Result	Limit	Limit	Result	Limit	Limit
1,1,1,2-Tetrachloroethane	NE	(5)	(5)	ND	(5)	(5)	ND	(5)	(5)	ND	(5)	(5)
1,1,1-Trichloroethane	200	ND	(0.2)	ND	(0.2)	(0.2)	NE	(0.2)	(0.2)	ND	(0.2)	(0.2)
1,1,2,2-Tetrachloroethane	1	ND	(0.15)	ND	(0.15)	(0.15)	ND	(0.15)	(0.15)	ND	(0.15)	(0.15)
1,1,2-Trichloroethane	32	ND	(0.2)	ND	(0.2)	(0.2)	ND	(0.2)	(0.2)	ND	(0.2)	(0.2)
1,1-Dichloroethane	NE	ND	(0.5)	ND	(0.5)	(0.5)	ND	(0.5)	(0.5)	NE	(0.5)	(0.5)
1,1-Dichloroethene	6	ND	(0.2)	ND	(0.2)	(0.2)	ND	(0.2)	(0.2)	ND	(0.2)	(0.2)
1,2,3-Trichloropropane	NE	ND	(5)	ND	(5)	(5)	ND	(5)	(5)	ND	(5)	(5)
1,2-Dichlorobenzene	NE	ND	(0.5)	ND	(0.5)	(0.5)	ND	(0.5)	(0.5)	ND	(0.5)	(0.5)
1,2-Dichloroethane	0.5	ND	(0.1)	ND	(0.1)	(0.1)	ND	(0.1)	(0.1)	ND	(0.1)	(0.1)
1,2-Dichloropropane	5	ND	(0.1)	ND	(0.1)	(0.1)	ND	(0.1)	(0.1)	ND	(0.1)	(0.1)
1,3-Dichlorobenzene	130	ND	(0.32)	ND	(0.32)	(0.32)	ND	(0.32)	(0.32)	ND	(0.32)	(0.32)
1,4-Dichlorobenzene	5	ND	(0.24)	ND	(0.24)	(0.24)	ND	(0.24)	(0.24)	ND	(0.24)	(0.24)
1-Chlorohexane	NE	ND	(5)	ND	(5)	(5)	ND	(5)	(5)	ND	(5)	(5)
2-Chloroethylvinylether	NE	ND	(0.5)	ND	(0.5)	(0.5)	ND	(0.5)	(0.5)	ND	(0.5)	(0.5)
Benzyl Chloride	NE	ND	(10)	ND	(10)	(10)	ND	(10)	(10)	ND	(10)	(10)
Bromobenzene	NE	ND	(5)	ND	(5)	(5)	ND	(5)	(5)	ND	(5)	(5)
Bromodichloromethane	100	ND	(0.1)	ND	(0.1)	(0.1)	ND	(0.1)	(0.1)	ND	(0.1)	(0.1)
Bromoform	100	ND	(0.5)	ND	(0.5)	(0.5)	ND	(0.5)	(0.5)	ND	(0.5)	(0.5)
Bromomethane	NE	ND	(1.2)	ND	(1.2)	(1.2)	ND	(1.2)	(1.2)	ND	(1.2)	(1.2)
Carbon Tetrachloride	0.5	ND	(0.12)	ND	(0.12)	(0.12)	ND	(0.12)	(0.12)	ND	(0.12)	(0.12)
Chlorobenzene	30	ND	(0.25)	ND	(0.25)	(0.25)	ND	(0.25)	(0.25)	ND	(0.25)	(0.25)
Chloroethane	NE	ND	(0.52)	ND	(0.52)	(0.52)	ND	(0.52)	(0.52)	ND	(0.52)	(0.52)
Chloroform	100	ND	(0.1)	ND	(0.1)	(0.1)	ND	(0.1)	(0.1)	ND	(0.1)	(0.1)
Chloromethane	NE	ND	(0.3)	ND	(0.3)	(0.3)	ND	(0.3)	(0.3)	ND	(0.3)	(0.3)
Dibromochloromethane	100	ND	(0.2)	ND	(0.2)	(0.2)	ND	(0.2)	(0.2)	ND	(0.2)	(0.2)
Dibromomethane	NE	ND	(5)	ND	(5)	(5)	ND	(5)	(5)	ND	(5)	(5)

ALL UNITS ARE ug/L

AL = DHS Action Level  
EW = Extraction well  
I = Result differs from last issue of report  
NA = Not analysed  
NS = Normal sample  
RAD = Radian Corporation, Sacramento  
U = Unconfirmed, second column not requested  
(a),(b),(c) = Result qualified due to one of the following analytical considerations.  
(a) = Coelution  
(b) = Interference  
(c) = Random error

B = Detected in blank, result not corrected  
FD = Field Duplicate  
MCL = DHS maximum contaminant level  
ND = Not detected at specified detection limit  
P = Previously confirmed  
RAS = Radian Analytical Services, Sacramento  
(2) = Result obtained from secondary column

C = Confirmed on second column  
G = Exceeds calibration range  
MW = Monitoring well  
NE = Threshold value not established  
PMCL = US EPA primary maximum contaminant level

TABLE 1-19 (Continued)

		WELL NUMBER							
		MW-1000		MW-1015		MW-1016		MW-1020	
Ground Water Zone		Middle		Middle		Shallow		Shallow	
Date Sampled		19-Feb-90		26-Jan-90		26-Jan-90		01-Feb-90	
Sampled By		RAD		RAD		RAD		RAD	
Date Analyzed		22-Feb-90		31-Jan-90		31-Jan-90		11-Feb-90	
Lab		RAS		RAS		RAS		RAS	
Field Analysis		NS		NS		NS		NS	
Lab Analysis		NS		NS		NS		NS	
		MW-1000		MW-1015		MW-1016		MW-1020	
		Middle		Middle		Shallow		Shallow	
		19-Feb-90		26-Jan-90		26-Jan-90		01-Feb-90	
		RAD		RAD		RAD		RAD	
		22-Feb-90		31-Jan-90		31-Jan-90		11-Feb-90	
		RAS		RAS		RAS		RAS	
		NS		NS		NS		NS	
		NS		NS		NS		NS	
		MW-1000		MW-1015		MW-1016		MW-1020	
		Middle		Middle		Shallow		Shallow	
		19-Feb-90		26-Jan-90		26-Jan-90		01-Feb-90	
		RAD		RAD		RAD		RAD	
		22-Feb-90		31-Jan-90		31-Jan-90		11-Feb-90	
		RAS		RAS		RAS		RAS	
		NS		NS		NS		NS	
		NS		NS		NS		NS	
		MW-1000		MW-1015		MW-1016		MW-1020	
		Middle		Middle		Shallow		Shallow	
		19-Feb-90		26-Jan-90		26-Jan-90		01-Feb-90	
		RAD		RAD		RAD		RAD	
		22-Feb-90		31-Jan-90		31-Jan-90		11-Feb-90	
		RAS		RAS		RAS		RAS	
		NS		NS		NS		NS	
		NS		NS		NS		NS	
		MW-1000		MW-1015		MW-1016		MW-1020	
		Middle		Middle		Shallow		Shallow	
		19-Feb-90		26-Jan-90		26-Jan-90		01-Feb-90	
		RAD		RAD		RAD		RAD	
		22-Feb-90		31-Jan-90		31-Jan-90		11-Feb-90	
		RAS		RAS		RAS		RAS	
		NS		NS		NS		NS	
		NS		NS		NS		NS	
		MW-1000		MW-1015		MW-1016		MW-1020	
		Middle		Middle		Shallow		Shallow	
		19-Feb-90		26-Jan-90		26-Jan-90		01-Feb-90	
		RAD		RAD		RAD		RAD	
		22-Feb-90		31-Jan-90		31-Jan-90		11-Feb-90	
		RAS		RAS		RAS		RAS	
		NS		NS		NS		NS	
		NS		NS		NS		NS	
		MW-1000		MW-1015		MW-1016		MW-1020	
		Middle		Middle		Shallow		Shallow	
		19-Feb-90		26-Jan-90		26-Jan-90		01-Feb-90	
		RAD		RAD		RAD		RAD	
		22-Feb-90		31-Jan-90		31-Jan-90		11-Feb-90	
		RAS		RAS		RAS		RAS	
		NS		NS		NS		NS	
		NS		NS		NS		NS	
		MW-1000		MW-1015		MW-1016		MW-1020	
		Middle		Middle		Shallow		Shallow	
		19-Feb-90		26-Jan-90		26-Jan-90		01-Feb-90	
		RAD		RAD		RAD		RAD	
		22-Feb-90		31-Jan-90		31-Jan-90		11-Feb-90	
		RAS		RAS		RAS		RAS	
		NS		NS		NS		NS	
		NS		NS		NS		NS	
		MW-1000		MW-1015		MW-1016		MW-1020	
		Middle		Middle		Shallow		Shallow	
		19-Feb-90		26-Jan-90		26-Jan-90		01-Feb-90	
		RAD		RAD		RAD		RAD	
		22-Feb-90		31-Jan-90		31-Jan-90		11-Feb-90	
		RAS		RAS		RAS		RAS	
		NS		NS		NS		NS	
		NS		NS		NS		NS	
		MW-1000		MW-1015		MW-1016		MW-1020	
		Middle		Middle		Shallow		Shallow	
		19-Feb-90		26-Jan-90		26-Jan-90		01-Feb-90	
		RAD		RAD		RAD		RAD	
		22-Feb-90		31-Jan-90		31-Jan-90		11-Feb-90	
		RAS		RAS		RAS		RAS	
		NS		NS		NS		NS	
		NS		NS		NS		NS	
		MW-1000		MW-1015		MW-1016		MW-1020	
		Middle		Middle		Shallow		Shallow	
		19-Feb-90		26-Jan-90		26-Jan-90		01-Feb-90	
		RAD		RAD		RAD		RAD	
		22-Feb-90		31-Jan-90		31-Jan-90		11-Feb-90	
		RAS		RAS		RAS		RAS	
		NS		NS		NS		NS	
		NS		NS		NS		NS	
		MW-1000		MW-1015		MW-1016		MW-1020	
		Middle		Middle		Shallow		Shallow	
		19-Feb-90		26-Jan-90		26-Jan-90		01-Feb-90	
		RAD		RAD		RAD		RAD	
		22-Feb-90		31-Jan-90		31-Jan-90		11-Feb-90	
		RAS		RAS		RAS		RAS	
		NS		NS		NS		NS	
		NS		NS		NS		NS	
		MW-1000		MW-1015		MW-1016		MW-1020	
		Middle		Middle		Shallow		Shallow	
		19-Feb-90		26-Jan-90		26-Jan-90		01-Feb-90	
		RAD		RAD		RAD		RAD	
		22-Feb-90		31-Jan-90		31-Jan-90		11-Feb-90	
		RAS		RAS		RAS		RAS	
		NS		NS		NS		NS	
		NS		NS		NS		NS	
		MW-1000		MW-1015		MW-1016		MW-1020	
		Middle		Middle		Shallow		Shallow	
		19-Feb-90		26-Jan-90		26-Jan-90		01-Feb-90	
		RAD		RAD		RAD		RAD	
		22-Feb-90		31-Jan-90		31-Jan-90		11-Feb-90	
		RAS		RAS		RAS		RAS	
		NS		NS		NS		NS	
		NS		NS		NS		NS	
		MW-1000		MW-1015		MW-1016		MW-1020	
		Middle		Middle		Shallow		Shallow	
		19-Feb-90		26-Jan-90		26-Jan-90		01-Feb-90	
		RAD		RAD		RAD		RAD	
		22-Feb-90		31-Jan-90		31-Jan-90		11-Feb-90	
		RAS		RAS		RAS		RAS	
		NS		NS		NS		NS	
		NS		NS		NS		NS	
		MW-1000		MW-1015		MW-1016		MW-1020	
		Middle		Middle		Shallow		Shallow	
		19-Feb-90		26-Jan-90		26-Jan-90		01-Feb-90	
		RAD		RAD		RAD		RAD	
		22-Feb-90		31-Jan-90		31-Jan-90		11-Feb-90	
		RAS		RAS		RAS		RAS	
		NS		NS		NS		NS	
		NS		NS		NS		NS	
		MW-1000		MW-1015		MW-1016		MW-1020	
		Middle		Middle		Shallow		Shallow	
		19-Feb-90		26-Jan-90		26-Jan-90		01-Feb-90	
		RAD		RAD		RAD		RAD	
		22-Feb-90		31-Jan-90		31-Jan-90		11-Feb-90	
		RAS		RAS		RAS		RAS	
		NS		NS		NS		NS	
		NS		NS		NS		NS	
		MW-1000		MW-1015		MW-1016		MW-1020	
		Middle		Middle		Shallow		Shallow	
		19-Feb-90		26-Jan-90		26-Jan-90		01-Feb-90	
		RAD		RAD		RAD		RAD	
		22-Feb-90		31-Jan-90		31-Jan-90		11-Feb-90	
		RAS		RAS		RAS		RAS	
		NS		NS		NS		NS	
		NS		NS		NS		NS	
		MW-1000		MW-1015		MW-1016		MW-1020	
		Middle		Middle		Shallow		Shallow	
		19-Feb-90		26-Jan-90		26-Jan-90		01-Feb-90	
		RAD		RAD		RAD		RAD	
		22-Feb-90		31-Jan-90		31-Jan-90		11-Feb-90	
		RAS		RAS		RAS		RAS	
		NS		NS		NS		NS	
		NS		NS		NS		NS	
		MW-1000		MW-1015		MW-1016		MW-1020	
		Middle		Middle		Shallow		Shallow	
		19-Feb-90		26-Jan-90		26-Jan-90		01-Feb-90	
		RAD		RAD		RAD		RAD	
		22-Feb-90		31-Jan-90		31-Jan-90		11-Feb-90	
		RAS		RAS		RAS		RAS	
		NS		NS		NS		NS	
		NS		NS		NS		NS	
		MW-1000		MW-1015		MW-1016		MW-1020	
		Middle		Middle		Shallow		Shallow	
		19-Feb-90		26-Jan-90		26-Jan-90		01-Feb-90	
		RAD		RAD		RAD		RAD	
		22-Feb-90		31-Jan-90		31-Jan-90		11-Feb-90	
		RAS		RAS		RAS		RAS	
		NS		NS		NS		NS	
		NS		NS		NS		NS	
		MW-1000		MW-1015		MW-1016		MW-1020	
		Middle		Middle		Shallow		Shallow	
		19-Feb-90		26-Jan-90		26-Jan-90		01-Feb-90	
		RAD		RAD		RAD		RAD	
		22-Feb-90		31-Jan-90		31-Jan-90		11-Feb-90	
		RAS		RAS		RAS		RAS	
		NS		NS		NS		NS	
		NS		NS		NS		NS	
		MW-1000		MW-1015		MW-1016		MW-1020	
		Middle		Middle		Shallow		Shallow	
		19-Feb-90		26-Jan-90		26-Jan-90		01-Feb-90	
		RAD		RAD		RAD		RAD	
		22-Feb-90		31-Jan-90		31-Jan-90		11-Feb-90	
		RAS		RAS		RAS		RAS	
		NS		NS		NS		NS	
		NS		NS		NS		NS	
		MW-1000		MW-1015		MW-1016		MW-1020	
		Middle		Middle		Shallow		Shallow	
		19-Feb-90		26-Jan-90		26-Jan-90		01-Feb-90	
		RAD		RAD		RAD		RAD	
		22-Feb-90		31-Jan-90		31-Jan-90		11-Feb-90	
		RAS		RAS		RAS		RAS	
		NS		NS		NS		NS	
		NS		NS		NS		NS	
		MW-1000		MW-1015		MW-1016		MW-1020	
		Middle		Middle		Shallow		Shallow	
		19-Feb-90		26-Jan-90		26-Jan-90		01-Feb-90	
		RAD		RAD		RAD		RAD	
		22-Feb-90		31-Jan-90		31-Jan-90		11-Feb-90	
		RAS		RAS		RAS		RAS	
		NS		NS		NS		NS	
		NS		NS		NS		NS	
		MW-1000		MW-1015		MW-1016		MW-1020	
		Middle		Middle		Shallow		Shallow	
		19-Feb-90		26-Jan-90		26-Jan-90		01-Feb-90	
		RAD		RAD		RAD		RAD	
		22-Feb-90		31-Jan-90		31-Jan-90		11-Feb-90	
		RAS		RAS		RAS		RAS	
		NS		NS		NS		NS	
		NS		NS		NS		NS	
		MW-1000		MW-1015		MW-1016		MW-1020	
		Middle		Middle		Shallow		Shallow	
		19-Feb-90		26-Jan-90		26-Jan-90		01-Feb-90	
		RAD		RAD		RAD		RAD	
		22-Feb-90		31-Jan-90		31-Jan-90		11-Feb-90	
		RAS		RAS		RAS		RAS	
		NS		NS		NS		NS	
		NS		NS		NS		NS	
		MW-1000		MW-1015		MW-1016		MW-1020	
		Middle		Middle		Shallow		Shallow	
		19-Feb-90		26-Jan-90		26-Jan-90		01-Feb-90	
		RAD		RAD		RAD		RAD	
		22-Feb-90		31-Jan-90		31-Jan-90		11-Feb-90	
		RAS		RAS		RAS		RAS	
		NS		NS		NS		NS	
		NS		NS		NS		NS	
		MW-1000		MW-1015		MW-1016		MW-1020	

TABLE 1-19 (Continued)

Ground Water Zone Date Sampled Sampled By Date Analyzed Lab Field Analysis Lab Analysis	WELL NUMBER											
	MW-1021				MW-1022				MW-1023			
	Shallow 01-Feb-90 RAD RAS NS NS	Shallow 01-Feb-90 RAD RAS PD NS	Middle 01-Feb-90 RAD RAS NS NS	Shallow 11-Feb-90 RAD RAS PD NS	Middle 01-Feb-90 RAD RAS NS NS	Shallow 11-Feb-90 RAD RAS PD NS	Middle 01-Feb-90 RAD RAS NS NS	Shallow 11-Feb-90 RAD RAS PD NS	Shallow 18-Jan-90 RAD RAS NS NS	Middle 01-Feb-90 RAD RAS NS NS	Shallow 18-Jan-90 RAD RAS NS NS	Shallow 19-Jan-90 RAS NS NS NS
Analyses	Maximum Contaminant Level Or Action Level	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Detection Limit
1,1,1,2-Tetrachloroethane	NE	ND	(5)	ND	(5)	ND	(5)	ND	(5)	ND	(5)	(5)
1,1,1-Trichloroethane	200	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)	(0.2)
1,1,2,2-Tetrachloroethane	1	ND	(0.15)	ND	(0.15)	ND	(0.15)	ND	(0.15)	ND	(0.15)	(0.15)
1,1,2-Trichloroethane	32	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)	(0.2)
1,1-Dichloroethane	NE	ND	(0.5)	ND	(0.5)	ND	(0.5)	ND	(0.5)	ND	(0.5)	(0.5)
1,1-Dichloroethane	6	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)	(0.2)
1,2,3-Trichloropropane	NE	ND	(5)	ND	(5)	ND	(5)	ND	(5)	ND	(5)	(5)
1,2-Dichlorobenzene	NE	ND	(0.5)	ND	(0.5)	ND	(0.5)	ND	(0.5)	ND	(0.5)	(0.5)
1,2-Dichloroethane	0.5	ND	(0.1)	ND	(0.1)	ND	(0.1)	ND	(0.1)	ND	(0.1)	(0.1)
1,2-Dichloropropane	5	ND	(0.1)	ND	(0.1)	ND	(0.1)	ND	(0.1)	ND	(0.1)	(0.1)
1,3-Dichlorobenzene	130	ND	(0.32)	ND	(0.32)	ND	(0.32)	ND	(0.32)	ND	(0.32)	(0.32)
1,4-Dichlorobenzene	5	ND	(0.24)	ND	(0.24)	ND	(0.24)	ND	(0.24)	ND	(0.24)	(0.24)
1-Chlorohexane	NE	ND	(5)	ND	(5)	ND	(5)	ND	(5)	ND	(5)	(5)
2-Chloroethylvinyl ether	NE	ND	(0.5)	ND	(0.5)	ND	(0.5)	ND	(0.5)	ND	(0.5)	(0.5)
Benzyl Chloride	NE	ND	(10)	ND	(10)	ND	(10)	ND	(10)	ND	(10)	(10)
Bromobenzene	NE	ND	(5)	ND	(5)	ND	(5)	ND	(5)	ND	(5)	(5)
Bromodichloromethane	100	ND	(0.1)	ND	(0.1)	ND	(0.1)	ND	(0.1)	ND	(0.1)	(0.1)
Bromoform	100	ND	(0.5)	ND	(0.5)	ND	(0.5)	ND	(0.5)	ND	(0.5)	(0.5)
Bromomethane	NE	ND	(1.2)	ND	(1.2)	ND	(1.2)	ND	(1.2)	ND	(1.2)	(1.2)
Carbon Tetrachloride	0.5	ND	(0.12)	ND	(0.12)	ND	(0.12)	ND	(0.12)	ND	(0.12)	(0.12)
Chlorobenzene	30	ND	(0.25)	ND	(0.25)	ND	(0.25)	ND	(0.25)	ND	(0.25)	(0.25)
Chloroethane	NE	ND	(0.52)	ND	(0.52)	ND	(0.52)	ND	(0.52)	ND	(0.52)	(0.52)
Chloroform	100	ND	(0.1)	ND	(0.1)	ND	(0.1)	ND	(0.1)	ND	(0.1)	(0.1)
Chloromethane	NE	ND	(0.3)	ND	(0.3)	ND	(0.3)	ND	(0.3)	ND	(0.3)	(0.3)
Dibromochloromethane	100	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)	(0.2)
Dibromomethane	NE	ND	(5)	ND	(5)	ND	(5)	ND	(5)	ND	(5)	(5)
Methylene Chloride	NE	ND	(0.4)	ND	(0.4)	ND	(0.4)	ND	(0.4)	ND	(0.4)	(0.4)

ALL UNITS ARE ug/L

AL = DHS Action Level  
 EW = Extraction Well  
 I = Result differs from last issue of report  
 NA = Not analyzed  
 NS = Normal sample  
 RAD = Radian Corporation, Sacramento  
 U = Unconfirmed, second column not requested  
 (a), (b), (c) = Result qualified due to one of the following analytical considerations:  
 (a) = Coelution  
 (b) = Interference  
 (c) = Random error

B = Detected in blank, result not corrected  
 PD = Field Duplicate  
 MCL = DHS maximum contaminant level  
 ND = Not detected at specified detection limit  
 P = Previously confirmed  
 RAS = Radian Analytical Services, Sacramento  
 (2) = Result obtained from secondary column  
 (a), (b), (c) = Result qualified due to one of the following analytical considerations:  
 (a) = Coelution  
 (b) = Interference  
 (c) = Random error

C = Confirmed on second column  
 G = Exceeds calibration range  
 MW = Monitoring well  
 NE = Threshold value not established  
 PMCL = US EPA primary maximum contaminant level

TABLE 1-19 (Continued)

Ground Water Zone Date Sampled Sampled By Date Analyzed Lab Field Analysis Lab Analysis	WELL NUMBER											
	MW-1021				MW-1022				MW-1023			
	Shallow 01-Feb-90 RAD 11-Feb-90 RAS NS NS	Shallow 01-Feb-90 RAD 12-Feb-90 RAS FD NS	Shallow 01-Feb-90 RAD 12-Feb-90 RAS FD NS	Shallow 01-Feb-90 RAD 12-Feb-90 RAS FD NS	Middle 01-Feb-90 RAD 11-Feb-90 RAS NS NS	Middle 01-Feb-90 RAD 11-Feb-90 RAS NS NS	Middle 01-Feb-90 RAD 11-Feb-90 RAS NS NS	Middle 01-Feb-90 RAD 11-Feb-90 RAS NS NS	Shallow 18-Jan-90 RAD 19-Jan-90 RAS NS NS	Shallow 18-Jan-90 RAD 19-Jan-90 RAS NS NS	Shallow 18-Jan-90 RAD 19-Jan-90 RAS NS NS	Shallow 18-Jan-90 RAD 19-Jan-90 RAS NS NS
Analytes	Maximum Contaminant Level Or Action Level	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Detection Limit
Tetrachloroethane	5 MCL	0.84 P	(0.1)	0.77 C	(0.1)	0.22 (a)	(0.1)	ND	(0.1)	ND	(0.1)	(0.1)
Total 1,2-Dichloroethane	16 AL	ND	(0.2)	0.58 C	(0.2)	0.49 C	(0.2)	ND	(0.2)	ND	(0.2)	(0.2)
Total Chlorotoluene	NE	ND	(25)	ND	(25)	ND	(25)	ND	(25)	ND	(25)	(25)
Trans-1,3-Dichloropropene	5 MCL	ND	(0.34)	ND	(0.34)	ND	(0.34)	ND	(0.34)	ND	(0.34)	(0.34)
Trichloroethane	5	13. P	(0.2)	12 C	(0.2)	5.9 C	(0.2)	ND	(0.2)	ND	(0.2)	(0.2)
Trichlorofluoroethane	150 AL	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)	(0.2)
Vinyl Chloride	0.5 MCL	ND	(10)	ND	(10)	ND	(10)	ND	(10)	ND	(10)	(10)
bis(2-Chloroisopropyl)Ether	NE	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)	(0.2)
cis-1,3-Dichloropropene	NE	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)	(0.2)

ALL UNITS ARE ug/L

AL = DHS Action Level  
EW = Extraction well  
I = Result differs from last issue of report  
NA = Not analyzed  
NS = Normal sample  
RAD = Radian Corporation, Sacramento  
U = Unconfirmed, second column not requested  
(a), (b), (c) = Result qualified due to one of the following analytical considerations:  
(a) = Coelution  
(b) = Interference  
(c) = Random error

B = Detected in blank, result not corrected  
FD = Field Duplicate  
MCL = DHS maximum contaminant level  
ND = Not detected at specified detection limit  
P = Previously confirmed  
RAS = Radian Analytical Services, Sacramento  
(2) = Result obtained from secondary column

C = Confirmed on second column  
G = Exceeds calibration range  
MW = Monitoring well  
NE = Threshold value not established  
PMCL = US EPA primary maximum contaminant level



TABLE 1-19 (Continued)

Ground Water Zone Date Sampled Sampled By Date Analyzed Lab Field Analysis Lab Analysis	MW-1024			MW-1025			MW-1044		
	Middle			Deep A			Shallow		
	18-Jan-90 RAD	19-Jan-90 RAS	NS MS	18-Jan-90 RAD	19-Jan-90 RAS	NS MS	26-Jan-90 RAD	31-Jan-90 RAS	Shallow 26-Jan-90 RAD
WELL NUMBER									
Analytes	Maximum Contaminant Level Or Action Level			Detection Limit			Detection Limit		
	Result	Result	Result	Result	Result	Result	Result	Result	Result
1,1,1,2-Tetrachloroethane	NE	ND	0.84 C	(5)	ND	0.47 C	ND	ND	ND
1,1,1-Trichloroethane	200	ND	(0.2)	(0.2)	ND	(0.15)	ND	ND	ND
1,1,2,2-Tetrachloroethane	1	ND	(0.15)	(0.15)	ND	(0.2)	ND	ND	ND
1,1,2-Trichloroethane	32	ND	(0.2)	(0.2)	ND	(0.5)	ND	ND	ND
1,1-Dichloroethane	NE	ND	(0.5)	(0.5)	ND	(0.2)	ND	ND	ND
1,1-Dichloroethane	6	ND	(0.2)	(0.2)	ND	(0.5)	ND	ND	ND
1,2,3-Trichloropropane	NE	ND	(5)	(5)	ND	(0.5)	ND	ND	ND
1,2-Dichlorobenzene	NE	ND	(0.5)	(0.5)	ND	(0.1)	ND	ND	ND
1,2-Dichloroethane	0.5	ND	(0.1)	(0.1)	ND	(0.32)	ND	ND	ND
1,2-Dichloropropane	5	ND	(0.1)	(0.1)	ND	(0.24)	ND	ND	ND
1,3-Dichlorobenzene	130	ND	(0.32)	(0.32)	ND	(0.5)	ND	ND	ND
1,4-Dichlorobenzene	5	ND	(0.24)	(0.24)	ND	(0.5)	ND	ND	ND
1-Chlorohexane	NE	ND	(5)	(5)	ND	(0.5)	ND	ND	ND
2-Chloroethylvinylether	NE	ND	(0.5)	(0.5)	ND	(10)	ND	ND	ND
Benzyl Chloride	NE	ND	(10)	(10)	ND	(0.1)	ND	ND	ND
Bromobenzene	NE	ND	(5)	(5)	ND	(0.1)	ND	ND	ND
Bromodichloromethane	100	ND	(0.1)	(0.1)	ND	(0.5)	ND	ND	ND
Bromoform	100	ND	(0.5)	(0.5)	ND	(1.2)	ND	ND	ND
Bromomethane	NE	ND	(1.2)	(1.2)	ND	(0.12)	ND	ND	ND
Carbon Tetrachloride	0.5	ND	(0.12)	(0.12)	ND	(0.25)	ND	ND	ND
Chlorobenzene	30	ND	(0.25)	(0.25)	ND	(0.52)	ND	ND	ND
Chloroethane	NE	ND	(0.52)	(0.52)	ND	(0.1)	ND	ND	ND
Chloroform	100	ND	(0.1)	(0.1)	ND	(0.3)	ND	ND	ND
Chloromethane	NE	ND	(0.3)	(0.3)	ND	(0.2)	ND	ND	ND
Dibromochloromethane	100	ND	(0.2)	(0.2)	ND	(5)	ND	ND	ND
Dibromomethane	NE	ND	(5)	(5)	ND	(0.4)	ND	ND	ND
Methylene Chloride	NE	ND	(0.4)	(0.4)	ND		ND	ND	ND

ALL UNITS ARE ug/L

AL = DHS Action Level  
EW = Extraction well  
I = Result differs from last issue of report  
MA = Not analyzed  
MS = Manual sample  
RAD = Radian Corporation, Sacramento  
U = Unconfirmed, second column not requested  
(a),(b),(c) = Result qualified due to one of the following analytical considerations  
(a) = Coelution  
(b) = Interference  
(c) = Random error

B = Detected in blank, result not corrected  
PD = Field Duplicate  
MCL = DHS maximum contaminant level  
ND = Not detected at specified detection limit  
P = Previously confirmed  
RAS = Radian Analytical Services, Sacramento  
(2) = Result obtained from secondary column

C = Confirmed on second column  
G = Exceeds calibration range  
MW = Monitoring well  
NE = Threshold value not established  
PMCL = US EPA primary maximum contaminant level

TABLE 1-19 (Continued)

WELL PURGE											
MW 1024				MW 1025				MW 1044			
Ground Water Zone		Midd's		Deep A		Shallow		Shallow		Shallow	
Date Sampled	18-Jan-90	18-Jan-90	18-Jan-90	26-Jan-90	26-Jan-90	26-Jan-90	26-Jan-90	26-Jan-90	26-Jan-90	26-Jan-90	26-Jan-90
Sampled By	RAD	RAD	RAD	RAD	RAD	RAD	RAD	RAD	RAD	RAD	RAD
Date Analyzed	19-Jan-90	19-Jan-90	19-Jan-90	31-Jan-90	31-Jan-90	31-Jan-90	31-Jan-90	31-Jan-90	31-Jan-90	31-Jan-90	31-Jan-90
Lab	RAS	RAS	RAS	NS	NS	NS	NS	NS	NS	NS	NS
Field Analysis	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Lab Analysis	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
-----											
Analytes	Max/Min Conc-minant			Detection		Detection		Detection		Detection	
	Level Or	Action	Level	Result	Limit	Result	Limit	Result	Limit	Result	Limit
Tetrachloroethane	5	MCL		ND	(0.1)	ND	(0.1)	ND	(0.1)	ND	(0.1)
Total 1,2-Dichloroethane	16	AL		ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)
Total Chloroethane	ME			ND	(25)	ND	(25)	ND	(25)	ND	(25)
Trans-1,3-Dichloropropene	ME			ND	(0.34)	ND	(0.34)	ND	(0.34)	ND	(0.34)
Trichloroethane	5	MCL		ND	(0.2)	ND	(0.2)	3 3 C	(0.2)	3 7 C	(0.2)
Trichlorofluoroethane	150	AL		ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)
Vinyl Chloride	0 5	MCL		ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)
bis(2-Chloroisopropyl) Ether	ME			ND	(10)	ND	(10)	ND	(10)	ND	(10)
cis-1,3-Dichloropropene	ME			ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)

TABLE 1-19 (Continued)

		MW-1045		MW-1046		MW-1047		MW-1048	
Ground Water Zone		Deep A		Deep B		Deep B		Deep B	
Date Sampled		12-Feb-90		14-Feb-90		14-Feb-90		15-Feb-90	
Sampled By		RAD		RAD		RAD		RAD	
Date Analyzed		16-Feb-90		18-Feb-90		21-Feb-90		21-Feb-90	
Lab		RAS		RAS		RAS		RAS	
Field Analysis		NS		NS		NS		NS	
Lab Analysis		NS		NS		NS		NS	
Analytes	Maximum Contaminant Level Or Action Level	Detection		Detection		Detection		Detection	
		Result	Limit	Result	Limit	Result	Limit	Result	Limit
1,1,1,1,2-Tetrachloroethane	NE	ND	(5)	ND	(5)	ND	(5)	ND	(5)
1,1,1,1-Trichloroethane	200	ND	(0.2)	0.35 C	(0.2)	ND	(0.2)	ND	(0.2)
1,1,1,2,2-Tetrachloroethane	1	ND	(0.15)	ND	(0.15)	ND	(0.15)	ND	(0.15)
1,1,1,2,2-Trichloroethane	32	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)
1,1,1,2-Trichloroethane	NE	ND	(0.5)	ND	(0.5)	ND	(0.5)	ND	(0.5)
1,1,1-Dichloroethane	6	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)
1,1,1-Dichloroethene	NE	ND	(5)	ND	(5)	ND	(5)	ND	(5)
1,1,2,3-Trichloropropene	NE	ND	(0.5)	ND	(0.5)	ND	(0.5)	ND	(0.5)
1,1,2-Dichlorobenzene	0.5	ND	(0.1)	0.60 (b)	(0.1)	ND	(0.1)	ND	(0.1)
1,1,2-Dichloroethane	5	ND	(0.1)	ND	(0.1)	ND	(0.1)	ND	(0.1)
1,1,2-Dichloropropene	130	ND	(0.32)	ND	(0.32)	ND	(0.32)	ND	(0.32)
1,1,3-Dichlorobenzene	5	ND	(0.24)	ND	(0.24)	ND	(0.24)	ND	(0.24)
1,1,4-Dichlorobenzene	NE	ND	(5)	ND	(5)	ND	(5)	ND	(5)
1-Chlorohexane	NE	ND	(0.5)	ND	(0.5)	ND	(0.5)	ND	(0.5)
2-Chloroethylvinyl ether	NE	ND	(10)	ND	(10)	ND	(10)	ND	(10)
Benzyl Chloride	NE	ND	(5)	ND	(5)	ND	(5)	ND	(5)
Bromobenzene	100	ND	(0.1)	ND	(0.1)	ND	(0.1)	ND	(0.1)
Bromodichloromethane	100	ND	(0.5)	ND	(0.5)	ND	(0.5)	ND	(0.5)
Bromoform	NE	ND	(1.2)	ND	(1.2)	ND	(1.2)	ND	(1.2)
Bromomethane	0.5	ND	(0.12)	ND	(0.12)	ND	(0.12)	ND	(0.12)
Carbon Tetrachloride	30	ND	(0.25)	ND	(0.25)	ND	(0.25)	ND	(0.25)
Chlorobenzene	NE	ND	(0.52)	ND	(0.52)	ND	(0.52)	ND	(0.52)
Chloroethane	100	ND	(0.1)	0.19 C	(0.1)	ND	(0.1)	ND	(0.1)
Chloroform	NE	ND	(0.3)	ND	(0.3)	ND	(0.3)	ND	(0.3)
Chloromethane	100	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)
Dibromochloromethane	NE	ND	(5)	ND	(5)	ND	(5)	ND	(5)
Dibromomethane	NE	ND	(0.4)	1.5 C	(0.4)	ND	(0.4)	ND	(0.4)
Methylene Chloride	NE	ND	(0.4)	1.5 C	(0.4)	ND	(0.4)	ND	(0.4)

TABLE 1-19 (Continued)

Ground Water Zone Date Sampled Sampled By Date Analyzed Lab Field Analysis Lab Analysis	MW-1045			MW-1046			MW-1047			MW-1048		
	Deep A			Deep B			Deep B			Deep B		
	12-Feb-90			14-Feb-90			14-Feb-90			15-Feb-90		
	RAD			RAD			RAD			RAD		
	16-Feb-90			18-Feb-90			21-Feb-90			21-Feb-90		
	RAS			RAS			RAS			RAS		
	NS			NS			NS			NS		
	NS			NS			NS			NS		
Analytes	Maximum Contaminant Level Or Action Level			Detection Limit			Detection Limit			Detection Limit		
	Level	Or	Action Level	Result	Limit		Result	Limit		Result	Limit	
Tetrachloroethene	5	MCL		ND	(0.1)		ND	(0.1)		ND	(0.1)	
Total 1,2-Dichloroethene	16	AL		1.9 C	(0.2)		6.2 C	(0.2)		ND	(0.2)	
Total Chloroethene	NE			ND	(25)		ND	(25)		ND	(25)	
Trans-1,3-Dichloropropene	NE			ND	(0.34)		ND	(0.34)		ND	(0.34)	
Trichloroethene	5	MCL		6.4 (c)	(0.2)		70 C	(0.2)		ND	(0.2)	
Trichlorofluoromethane	150	AL		ND	(0.2)		ND	(0.2)		ND	(0.2)	
Vinyl Chloride	0.5	MCL		ND	(0.2)		ND	(0.2)		ND	(0.2)	
bis(2-Chloroisopropyl) Ether	NE			ND	(10)		ND	(10)		ND	(10)	
cis-1,3-Dichloropropene	NE			ND	(0.2)		ND	(0.2)		ND	(0.2)	

ALL UNITS ARE ug/L

AL = DHS Action Level  
 EW = Extraction well  
 I = Result differs from last issue of report  
 NA = Not analyzed  
 NS = Normal sample  
 RAD = Radian Corporation, Sacramento  
 U = Unconfirmed, second column not requested  
 (a), (b), (c) = Result qualified due to one of the following analytical considerations:  
 (a) = Coelution  
 (b) = Interference  
 (c) = Random error  
 B = Detected in blank, result not corrected  
 PD = Field Duplicate  
 MCL = DHS maximum contaminant level  
 ND = Not detected at specified detection limit  
 P = Previously confirmed  
 RAS = Radian Analytical Services, Sacramento  
 (2) = Result obtained from secondary column  
 C = Confirmed on second column  
 G = Exceeds calibration range  
 MW = Monitoring well  
 NE = Threshold value not established  
 PMCL = US. EPA primary maximum contaminant level



TABLE 1-19 (Continued)

Ground Water Zone Date Sampled Sampled By Date Analyzed Lab Field Analysis Lab Analysis	MW-1049			MW-1050			MW-1051			MW-1052		
	Maximum Contaminant Level Or Action Level	Detection		Result	Detection		Result	Detection		Result	Detection	
		Limit	Limit		Limit	Limit		Limit	Limit			
Middle				Deep A			Deep B			Deep B		
09-Feb-90				09-Feb-90			09-Feb-90			12-Feb-90		
RAD				RAD			RAD			RAD		
13-Feb-90				13-Feb-90			13-Feb-90			16-Feb-90		
RAS				RAS			RAS			RAS		
NS				NS			NS			NS		
NS				NS			NS			NS		
Analyses												
5 MCL	ND	(0.1)	ND	0.21 C	(0.2)	0.41 C	1.0 C	(0.2)	ND	(0.1)	ND	(0.1)
16 AL	5.7 C	(0.2)	0.21 C	ND	(25)	ND	ND	(25)	ND	(0.2)	ND	(0.2)
Tetralchloroethene	ND	(25)	ND	ND	(0.34)	ND	ND	(0.34)	ND	(25)	ND	(25)
Total 1,2-Dichloroethene	ND	(0.34)	ND	0.96 (b)	(0.2)	2.0 C	ND	(0.2)	ND	(0.34)	ND	(0.34)
Total Chloro-oluena	ND	(0.2)	ND	ND	(0.2)	ND	ND	(0.2)	ND	(0.2)	ND	(0.2)
Trans-1,3-Dichloropropene	13. C	(0.2)	ND	ND	(0.2)	ND	ND	(0.2)	ND	(0.2)	ND	(0.2)
Trichloroethene	ND	(0.2)	ND	ND	(0.2)	ND	ND	(0.2)	ND	(0.2)	ND	(0.2)
Trichlorofluoroethane	150 AL	(0.2)	ND	ND	(0.2)	ND	ND	(0.2)	ND	(0.2)	ND	(0.2)
Vinyl Chloride	0.5 MCL	(0.2)	ND	ND	(10)	ND	ND	(10)	ND	(10)	ND	(10)
bis(2-Chloroisopropyl) Ether	NE	(0.2)	ND	ND	(0.2)	ND	ND	(0.2)	ND	(0.2)	ND	(0.2)
bis-1,3-Dichloropropene	NE	(0.2)	ND	ND	(0.2)	ND	ND	(0.2)	ND	(0.2)	ND	(0.2)

ALL UNITS ARE W/L

ALL UNITS ARE ug/L

AL	= DHS Action Level	B	= Detected in blank, result not corrected	C	= Confirmed on second column
EW	= Extraction well	PD	= Field Duplicate	G	= Exceeds calibration range
I	= Result differs from last issue of report	MCL	= DHS maximum contaminant level	MW	= Monitoring well
NA	= Not analyzed	ND	= Not detected at specified detection limit	NE	= Threshold value not established
MS	= Normal sample	P	= Previously confirmed	PMCL	= US. EPA primary maximum contaminant level
RAD	= Radon Corporation, Sacramento	RAS	= Radon Analytical Services, Sacramento		
U	= Uncollected, second column not requested	(2)	= Result obtained from secondary column		
(a),(b),(c)	= Result qualified due to one of the following analytical considerations.				
(a)	= Coelution	(b)	= Interference	(c)	= Random error.

TABLE 1-19 (Continued)

WELL NUMBER

HW-1053

Ground Water Zone Shallow  
Date Sampled 23-Feb-90  
Sampled By RAD  
Date Analyzed 27-Feb-90  
Lab RAS  
Field Analysis NS  
Lab Analysis NS

Analytes	Maximum Contaminant Level Or Action Level	Detection Limit
1,1,1,2-Tetrachloroethane	NE	MD (5)
1,1,1-Trichloroethane	200	MD (0.2)
1,1,2,2-Tetrachloroethane	1	MD (0.15)
1,1,2-Trichloroethane	32	MD (0.2)
1,1-Dichloroethane	NE	MD (0.5)
1,1-Dichloroethane	6	MD (0.2)
1,2,3-Trichloropropane	NE	MD (5)
1,2-Dichlorobenzene	NE	MD (0.5)
1,2-Dichloroethane	0.5	MD (0.1)
1,2-Dichloropropane	5	MD (0.1)
1,3-Dichlorobenzene	130	MD (0.32)
1,4-Dichlorobenzene	5	MD (0.24)
1-Chlorobenzene	NE	MD (5)
2-Chloroethylvinylether	NE	MD (0.5)
Benzyl Chloride	NE	MD (10)
Bromobenzene	NE	MD (5)
Bromodichloroethane	100	MD (0.1)
Bromoform	100	MD (0.5)
Bromoethane	NE	MD (1.2)
Carbon Tetrachloride	0.5	MD (0.12)
Chlorobenzene	30	MD (0.25)
Chloroethane	NE	MD (0.52)
Chloroform	100	MD (0.1)
Chloroethane	NE	MD (0.3)
Dibromochloroethane	100	MD (0.2)
Dibromoethane	NE	MD (5)
Methylene Chloride	NE	MD (0.4)

ALL UNITS ARE ug/L

AL = DHS Action Level  
EW = Extraction well  
I = Result differs from last issue of report  
NA = Not analyzed  
NS = Normal sample  
RAD = Radian Corporation, Sacramento  
U = Unconfirmed, second column not requested  
(a), (b), (c) = Result qualified due to one of the following analytical considerations.  
(a) = Coelution  
(b) = Interference  
(c) = Random error  
B = Detected in blank, result not corrected  
FD = Field Duplicate  
MCL = DHS maximum contaminant level  
MD = Not detected at specified detection limit  
P = Previously confirmed  
RAS = Radian Analytical Services, Sacramento  
(2) = Result obtained from secondary column  
C = Confirmed on second column  
G = Exceeds calibration range  
MW = Monitoring well  
NE = Threshold value not established  
PMCL = US EPA primary maximum contaminant level

TABLE 1-19 (Continued)

WELL NUMBER

MW-1053

Ground Water Zone  
Date Sampled  
Sampled By  
Date Analyzed  
Lab  
Field Analysis  
Lab Analysis

Shallow  
23-Feb-90  
RAD  
27-Feb-90  
RAS  
NS  
NS

Maximum Contaminant  
Level Or Action Level

Detection  
Limit

Analytes	Maximum Contaminant Level Or Action Level	Result	Detection Limit
Tetrachloroethers	5 MCL	ND	(0.1)
Total 1,2-Dichloroethene	16 AL	0.49 IC	(0.2)
Total Chlorotoluene	NE	ND	(25)
Trans-1,3-Dichloropropene	NE	ND	(0.34)
Trichloroethene	5 MCL	0.66 IC	(0.2)
Trichlorofluoromethane	150 AL	ND	(0.2)
Vinyl Chloride	0.5 MCL	ND	(0.2)
bis(2-Chloroisopropyl)Ether	NE	ND	(10)
cis-1,3-Dichloropropene	NE	ND	(0.2)

ALL UNITS ARE ug/L

AL = DHS Action Level  
EW = Extraction well  
I = Result differs from last issue of report  
NA = Not analyzed  
NS = Normal sample  
RAD = Radian Corporation, Sacramento  
U = Unconfirmed, second column not requested  
(a), (b), (c) = Result qualified due to one of the following analytical considerations:  
(a) = Coelution  
B = Detected in blank, result not corrected  
PD = Field Duplicate  
MCL = DHS maximum contaminant level  
ND = Not detected at specified detection limit  
P = Previously confirmed  
RAS = Radian Analytical Services, Sacramento  
(2) = Result obtained from secondary column  
(b) = Interference  
C = Confirmed on second column  
G = Exceeds calibration range  
MW = Monitoring well  
NE = Threshold value not established  
PMCL = US. EPA primary maximum contaminant level  
(c) = Random error



TABLE 1-20. MASTER LOG OF WELLS SAMPLED FOR METHOD 8240 FOR THE SOUTHWEST AREA,  
GROUNDWATER SAMPLING AND ANALYSIS PROGRAM,  
JANUARY TO MARCH 1990, MCCLELLAN AIR FORCE BASE

WELL NUMBER

MW-1045

Ground Water Zone  
Date Sampled  
Sampled By  
Date Analyzed  
Lab  
Field Analysis  
Lab Analysis

Deep A  
12-Feb-90  
RAD  
19-Feb-90  
RAS  
MS  
MS

Analytes

Maximum Contaminant  
Level Or Action Level

Result

Detection  
Limit

1,1,1-Trichloroethane	200 MCL	ND	(3.8)
1,1,2,2-Tetrachloroethane	1 MCL	ND	(5)
1,1,2-Trichloroethane	32 MCL	ND	(5)
1,1-Dichloroethane	NE	ND	(4.7)
1,1-Dichloroethane	6 MCL	ND	(2.8)
1,2-Dichloroethane	0.5 MCL	ND	(2.8)
1,2-Dichloropropane	5 PMCL	ND	(5)
2-Butanone	NE	ND	(10)
2-Chloroethylvinylether	NE	ND	(10)
2-Hexanone	NE	ND	(10)
4-Methyl-2-Pentanone	NE	ND	(10)
Acetone	NE	ND	(10)
Benzene	1 MCL	ND	(4.4)
Bromodichloromethane	100 PMCL	ND	(3.5)
Bromoform	100 PMCL	ND	(4.7)
Bromomethane	NE	ND	(5)
Carbon Disulfide	NE	ND	(5)
Carbon Tetrachloride	0.5 MCL	ND	(2.8)
Chlorobenzene	30 AL	ND	(5)
Chloroethane	NE	ND	(5)
Chloroform	100 PMCL	ND	(2.5)
Chloromethane	NE	ND	(5)
Dibromochloromethane	100 PMCL	ND	(3.1)
Ethylbenzene	680 MCL	ND	(5)
Methylene Chloride	NE	ND	(5)
Styrene	NE	ND	(5)

ALL UNITS ARE ug/L

AL = DHS Action Level  
EW = Extraction Well  
I = Result differs from last issue of report  
NA = Not analyzed  
NS = Normal sample  
RAD = Radian Corporation, Sacramento  
U = Unconfirmed, second column not requested

B = Detected in blank, result not corrected  
FD = Field Duplicate  
MCL = DHS maximum contaminant level  
ND = Not detected at specified detection limit  
P = Previously confirmed  
RAS = Radian Analytical Services, Sacramento

C = Confirmed on second column  
G = Exceeds calibration range  
MW = Monitoring well  
NL = Threshold value not established  
PMCL = US EPA primary maximum contaminant level

TABLE 1-20 (Continued)

		WELL NUMBER	
Ground Water Zone		HW-1045	
Date Sampled		Deep A	
Sampled By		12-Feb-90	
Date Analyzed		RAD	
Lab		19-Feb-90	
Field Analysis		RAS	
Lab Analysis		NS	
		NS	
Analytes		Maximum Contaminant Level Or Action Level	Detection Limit
Tetrachloroethene		5 MCL	ND (4.1)
Toluene		NE	ND (5)
Total Xylenes		1750 MCL	ND (5)
Trans-1,3-Dichloropropene		NE	ND (5)
Trichloroethene		5 MCL	4.0 (2.5)
Vinyl Acetate		NE	ND (6.9)
Vinyl Chloride		0.5 MCL	ND (5)
cis-1,3-Dichloropropene		NE	ND (5)
trans-1,2-Dichloroethene		NE	ND (5)

ALL UNITS ARE ug/L

AL = DHS Action Level  
 EW = Extraction well  
 I = Result differs from last issue of report  
 NA = Not analyzed  
 NS = Normal sample  
 RAD = Radian Corporation, Sacramento  
 U = Unconfirmed, second column not requested

B = Detected in blank, result not corrected  
 PD = Field Duplicate  
 MCL = DHS maximum contaminant level  
 ND = Not detected at specified detection limit  
 P = Previously confirmed  
 RAS = Radian Analytical Services, Sacramento

C = Confirmed on second column  
 G = Exceeds calibration range  
 MW = Monitoring well  
 NE = Threshold value not established  
 FMCL = US EPA primary maximum contaminant level

TABLE 1-21. MASTER LOG OF WELLS SAMPLED FOR METHOD 6010 FOR THE SOUTHWEST AREA,  
GROUNDWATER SAMPLING AND ANALYSIS PROGRAM,  
JANUARY TO MARCH 1990, McCELLENN AIR FORCE BASE

Analytes	Maximum Contaminant Level Or Action Level	WELL NUMBER				Ground Water Zone	Date Sampled Sampled By	Date Analyzed Lab	Field Analysis Lab Analysis
		MW-1023	MW-1024	MW-1025	MW-1046				
		Shallow	Middle	Deep A	Deep B				
Aluminum	1 MCL	0.43	0.13	ND	0.049	18-Jan-90	RAD	26-Jan-90	RAS
Antimony	NE	ND	ND	ND	ND	18-Jan-90	RAD	26-Jan-90	RAS
Arsenic	0.05 MCL	ND	ND	ND	ND	18-Jan-90	RAD	26-Jan-90	RAS
Barium	1 MCL	0.057	0.030	0.044	0.078	18-Jan-90	RAD	26-Jan-90	RAS
Beryllium	NE	ND	ND	ND	ND	18-Jan-90	RAD	26-Jan-90	RAS
Boron	NE	0.31 B	0.32 B	0.28 B	0.28	18-Jan-90	RAD	26-Jan-90	RAS
Cadmium	0.01 MCL	ND	ND	ND	ND	18-Jan-90	RAD	26-Jan-90	RAS
Calcium	NE	21.	21	15.	24.	18-Jan-90	RAD	26-Jan-90	RAS
Chromium	0.05 MCL	ND	ND	ND	ND	18-Jan-90	RAD	26-Jan-90	RAS
Cobalt	NE	ND	ND	ND	ND	18-Jan-90	RAD	26-Jan-90	RAS
Copper	NE	0.023	0.024	ND	0.018	18-Jan-90	RAD	26-Jan-90	RAS
Iron	NE	0.34	0.24	0.012	0.96	18-Jan-90	RAD	26-Jan-90	RAS
Lead	0.05 MCL	ND	ND	ND	ND	18-Jan-90	RAD	26-Jan-90	RAS
Magnesium	NE	5.9	5.6	12.	17	18-Jan-90	RAD	26-Jan-90	RAS
Manganese	NE	0.049	0.067	ND	0.057	18-Jan-90	RAD	26-Jan-90	RAS
Molybdenum	NE	ND	ND	ND	ND	18-Jan-90	RAD	26-Jan-90	RAS
Nickel	NE	0.016	0.040	0.024	0.016	18-Jan-90	RAD	26-Jan-90	RAS
Potassium	NE	ND	ND	ND	ND	18-Jan-90	RAD	26-Jan-90	RAS
Selenium	0.01 MCL	ND	ND	ND	ND	18-Jan-90	RAD	26-Jan-90	RAS
Silver	NE	17.	18.	38	37	18-Jan-90	RAD	26-Jan-90	RAS
Sodium	0.05 MCL	ND	ND	ND	ND	18-Jan-90	RAD	26-Jan-90	RAS
Sulfur	NE	6.1 B	7.4 B	15. B	18	18-Jan-90	RAD	26-Jan-90	RAS
Thallium	NE	ND	ND	ND	ND	18-Jan-90	RAD	26-Jan-90	RAS
Vanadium	NE	0.0090	0.0090	0.024	0.026	18-Jan-90	RAD	26-Jan-90	RAS
Zinc	NE	0.012	0.0050	0.0040	0.13	18-Jan-90	RAD	26-Jan-90	RAS

ALL UNITS ARE mg/L

AL = DHS Action Level  
EW = Extraction well  
I = Result differs from last issue of report  
NA = Not analyzed  
NS = Normal sample  
RAD = Radian Corporation, Sacramento  
U = Unconfirmed, second column not requested

B = Detected in blank, result not corrected  
FD = Field Duplicate  
MCL = DHS maximum contaminant level  
ND = Not detected at specified detection limit  
P = Previously confirmed  
RAS = Radian Analytical Services, Sacramento

C = Confirmed on second column  
G = Exceeds calibration range  
MW = Monitoring well  
NE = Threshold value not established  
PMCL = US EPA primary maximum contaminant level  
S = Determined by method of standard addition

TABLE 1 21 (Continued)

		MW-1047		MW-1048		MW-1051	
Ground Water Zone		Deep B		Deep B		Deep B	
Date Sampled		14-Feb-90		15-Feb-90		09-Feb-90	
Sampled By		RAD		RAD		RAD	
Date Analyzed		28-Feb-90		28-Feb-90		22-Feb-90	
Lab		RAS		RAS		RAS	
Field Analysis		NS		NS		NS	
Lab Analysis		NS		NS		NS	

TABLE 1-22. MASTER LOG OF WELLS SAMPLED FOR METHOD 7196 FOR THE SOUTHWEST AREA,  
GROUNDWATER SAMPLING AND ANALYSIS PROGRAM,  
JANUARY TO MARCH 1990, McCLELLAN AIR FORCE BASE

	WELL NUMBER								
	MW-1023	MW-1024	MW-1025	MW-1047					
Ground Water Zone	Shallow	Middle	Deep A	Deep B					
Date Sampled	18-Jan-90	18-Jan 90	18 Jan 90	14-Feb-90					
Sampled By	RAD	RAD	RAD	RAD					
Date Analyzed	19-Jan-90	19-Jan 90	19-Jan-90	15-Feb-90					
Lab	RAS	RAS	RAS	RAS					
Field Analysis	NS	NS	NS	NS					
Lab Analysis	NS	NS	NS	NS					
<hr/>									
Maximum Contaminant									
Level Or Action Level									
Analytes	Result	Result	Result	Result	Detection Limit	Detection Limit	Detection Limit	Detection Limit	Detection Limit
Chromium, Hexavalent	50	50	50	50	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
<hr/>									

ALL UNITS ARE mg/L

AL = DHS Action Level  
 EW = Extraction well  
 I = Result differs from last issue of report  
 NA = Not analysed  
 NS = Normal sample  
 RAD = Radian Corporation, Sacramento  
 U = Unconfirmed, second column not requested

B = Detected in blank, result not corrected  
 PD = Field Duplicate  
 MCL = DHS maximum contaminant level  
 ND = Not detected at specified detection limit  
 P = Previously confirmed  
 RAS = Radian Analytical Services, Sacramento

C = Confirmed on second column  
 G = Exceeds calibration range  
 MW = Monitoring well  
 NE = Threshold value not established  
 PMCL = US. EPA primary maximum contaminant level  
 S = Determined by method of standard addition

TABLE 1 22 (Continued)

		WELL NUMBER	
		HW-1048	HW-1051
Ground Water Zone		Deep B	Deep B
Date Sampled		15-Feb-90	09 Feb-90
Sampled By		RAD	RAD
Date Analyzed		16-Feb-90	09-Feb-90
Lab		RAS	RAS
Field Analysis		NS	NS
Lab Analysis		NS	NS
		Detection Limit	
Analytes	Maximum Contaminant Level Or Action Level	Result	Result
Chromium, Hexavalent	50 PHCL	ND	ND (0.02)

ALL UNITS ARE mg/L

AL = DHS Action Level  
 EW = Extraction Well  
 I = Result differs from last issue of report  
 NA = Not analyzed  
 NS = Normal sample  
 RAD = Radian Corporation, Sacramento  
 U = Unconfirmed, second column not requested

B = Detected in blank, result not corrected  
 PD = Field Duplicate  
 MCL = DHS maximum contaminant level  
 ND = Not detected at specified detection limit  
 P = Previously confirmed  
 RAS = Radian Analytical Services, Sacramento

C = Confirmed on second column  
 G = Exceeds calibration range  
 HW = Monitoring well  
 NE = Threshold value not established  
 PHCL = US EPA primary maximum contaminant level  
 S = Determined by method of standard addition

TABLE 1-23. MASTER LOG OF WELLS SAMPLED FOR METHOD 8010 FOR AREA C AND ADJACENT ON BASE AREAS,  
GROUNDWATER SAMPLING AND ANALYSIS PROGRAM,  
JANUARY TO MARCH 1990, MCCLELLAN AIR FORCE BASE

Ground Water Zone Date Sampled Sampled By Date Analyzed Lab Field Analysis Lab Analysis	WELL NUMBER					
	EW-137		EW-137		EW-140	
	Deep A 23-Jan-90 RAD 24-Jan-90 RAS NS NS	Deep A 07-Feb-90 RAD 08-Feb-90 RAS NS NS	Deep A 07-Mar-90 RAD 05-Mar-90 RAS NS NS	Deep A 23-Jan-90 RAD 24-Jan-90 RAS NS NS		
Maximum Contaminant Level Or Action Level						
Analytes	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit
1,1,1,2-Tetrachloroethane	NE	(100)	ND	(250)	ND	(50)
1,1,1,1-Tetrachloroethane	200	(4)	ND	(10)	ND, I	(2)
1,1,1,2,2-Tetrachloroethane	1	(3)	ND	(7.5)	ND	(1.5)
1,1,1,2-Trichloroethane	32	(4)	ND	(10)	ND	(2)
1,1,1-Dichloroethane	NE	(10)	ND	(25)	ND	(5)
1,1,1-Dichloroethane	6	(4)	ND	(10)	ND	(2)
1,1,1,2,3-Trichloropropane	NE	(100)	ND	(250)	ND	(50)
1,1,2-Dichlorobenzene	NE	(10)	ND	(25)	ND	(5)
1,1,2-Dichloroethane	0.5	(2)	ND	(5)	ND	(1)
1,1,2-Dichloropropane	5	(2)	ND	(5)	ND	(1)
1,1,3-Dichlorobenzene	130	(6.4)	ND	(16)	ND	(3.2)
1,1,4-Dichlorobenzene	5	(4.8)	ND	(12)	ND	(2.4)
1-Chlorohexane	NE	(10)	ND	(250)	ND	(50)
2-Chloroethylvinylethar Benzyl Chloride	NE	(10)	ND	(25)	ND	(5)
Bromobenzene	NE	(200)	ND	(500)	ND	(100)
Bromodichloromethane	100	(100)	ND	(250)	ND	(50)
Bromomethane	100	(2)	ND	(5)	ND	(1)
Carbon Tetrachloride	NE	(10)	ND	(25)	ND	(5)
Chlorobenzene	0.5	(24)	ND	(59)	ND	(12)
Chloroethane	30	(6)	ND	(6)	ND	(1.2)
Chloroform	NE	(13)	ND	(13)	ND	(2.5)
Chloromethane	100	(10)	ND	(26)	ND	(5.2)
Dibromochloromethane	NE	(2)	ND	(5)	ND	(1)
Dibromomethane	100	(6)	ND	(15)	ND	(3)
	NE	(4)	ND	(10)	ND	(2)
	NE	(100)	ND	(250)	ND	(50)

ALL UNITS ARE ug/L

AL = DHS Action Level  
EW = Extraction well  
I = Result differs from last issue of report  
NA = Not analyzed  
NS = Normal sample  
RAD = Radian Corporation, Sacramento  
U = Unconfirmed, second column not requested  
(a), (b), (c) = Result qualified due to one of the following analytical considerations:  
(a) = Coelution  
(b) = Interference  
(c) = Random error  
B = Detected in blank, result not corrected  
FD = Field Duplicate  
MCL = DHS maximum contaminant level  
ND = Not detected at specified detection limit  
P = Previously confirmed  
RAS = Radian Analytical Services, Sacramento  
(2) = Result obtained from secondary column  
C = Confirmed on second column  
G = Exceeds calibration range  
HW = Monitoring well  
NE = Threshold value not established  
PMCL = US EPA primary maximum contaminant level

TABLE 1 23 (Continued)

Analytes	Maximum Contaminant Level Or Action Level	EW-137				EW 137				EW 140			
		Deep A	Deep A	Deep A	Deep A	Deep A	Deep A	Deep A	Deep A	Deep A	Deep A	Deep A	Deep A
Ground Water Zone		23-Jan-90	02-Feb-90	02-Feb-90	02-Feb-90	02-Feb-90	02-Feb-90	02-Feb-90	02-Feb-90	02-Feb-90	02-Feb-90	02-Feb-90	02-Feb-90
Date Sampled		RAD	RAD	RAD	RAD	RAD	RAD	RAD	RAD	RAD	RAD	RAD	RAD
Sampled By													
Date Analyzed		24-Jan-90	08-Feb-90	08-Feb-90	08-Feb-90	08-Feb-90	08-Feb-90	08-Feb-90	08-Feb-90	08-Feb-90	08-Feb-90	08-Feb-90	08-Feb-90
Lab		RAS	RAS	RAS	RAS	RAS	RAS	RAS	RAS	RAS	RAS	RAS	RAS
Field Analysis		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Lab Analysis		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Analytes	Maximum Contaminant Level Or Action Level	EW-137				EW 137				EW 140			
		Deep A	Deep A	Deep A	Deep A	Deep A	Deep A	Deep A	Deep A	Deep A	Deep A	Deep A	Deep A
Methylene Chloride	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	5 MCL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total 1,2-Dichloroethene	16 AL	22 C	19 C	19 C	19 C	19 C	19 C	19 C	19 C	19 C	19 C	19 C	19 C
Total Chlorotoluene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trans-1,3-Dichloropropene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	5 MCL	380 C	400 C	400 C	400 C	400 C	400 C	400 C	400 C	400 C	400 C	400 C	400 C
Trichlorofluoromethane	150 AL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Chloride	0.5 MCL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroisopropyl)Ether	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ALL UNITS ARE ug/L

AL = DHS Action Level  
 EW = Extraction Well  
 I = Result differs from last issue of report  
 RA = Not analyzed  
 NS = Normal sample  
 RAD = Radian Corporation, Sacramento  
 U = Unconfirmed, second column not requested  
 (a), (b), (c) = Result qualified due to one of the following analytical considerations:  
 (a) = Coelution  
 (b) = Interference  
 (c) = Random error

B = Detected in blank, result not corrected  
 PD = Field Duplicate  
 MCL = DHS maximum contaminant level  
 ND = Not detected at specified detection limit  
 P = Previously confirmed  
 RAS = Radian Analytical Services, Sacramento  
 (2) = Result obtained from secondary column  
 (a), (b), (c) = Result qualified due to one of the following analytical considerations:  
 (a) = Coelution  
 (b) = Interference  
 (c) = Random error

C = Confirmed on second column  
 G = Exceeds calibration range  
 MW = Monitoring Well  
 NE = Threshold value not established  
 PMCL = US. EPA primary maximum contaminant level



TABLE 1-23 (Continued)

Ground Water Zone Date Sampled Sampled By Date Analyzed Lab Field Analysis Lab Analysis	WELL NUMBER					
	EW-140		EW-141		EW-141	
	Deep A 02-Feb-90 RAD 09-Feb-90 RAS NS NS	Deep A 02-Mar-90 RAD 05-Mar-90 RAS NS NS	Deep B 23-Jan-90 RAD 24-Jan-90 RAS NS NS	Deep B 23-Jan-90 RAD 24-Jan-90 RAS NS NS	Deep B 02-Feb-90 RAD 09-Feb-90 RAS NS NS	EW-141
Analytes	Maximum Contaminant Level Or Action Level	Detection Limit	Result	Detection Limit	Result	Detection Limit
1,1,1,2-Tetrachloroethane	NE	(250)	ND	(50)	ND	(250)
1,1,1-Trichloroethane	200	(10)	ND	(2)	ND	(10)
1,1,2,2-Tetrachloroethane	1	(7.5)	ND	(1.5)	ND	(7.5)
1,1,2-Trichloroethane	32	(10)	ND	(2)	ND	(10)
1,1-Dichloroethane	NE	(25)	8 3 PI	(5)	8 7 C	(25)
1,1-Dichloroethane	6	(10)	ND	(2)	ND	(10)
1,2,3-Trichloropropane	NE	(250)	ND	(50)	ND	(250)
1,2-Dichlorobenzene	NE	(25)	ND	(1)	ND	(25)
1,2-Dichloroethane	0.5	(5)	ND	(1)	ND	(5)
1,2-Dichloropropane	5	(16)	ND	(3.2)	ND	(16)
1,3-Dichlorobenzene	130	(12)	ND	(2.4)	ND	(12)
1,4-Dichlorobenzene	5	(250)	ND	(50)	ND	(250)
1-Chlorohexane	NE	(25)	ND	(5)	ND	(25)
2-Chloroethylvinyl ether	NE	(500)	ND	(100)	ND	(500)
Benzyl Chloride	NE	(250)	ND	(50)	ND	(250)
Bromobenzene	NE	(5)	ND	(1)	ND	(5)
Bromodichloromethane	100	(25)	ND	(5)	ND	(25)
Bromoform	100	(59)	ND	(12)	ND	(59)
Bromooethane	NE	(6)	ND	(1.2)	ND	(6)
Carbon Tetrachloride	0.5	(13)	ND	(2.5)	ND	(13)
Chlorobenzene	30	(26)	ND	(5.2)	ND	(26)
Chloroethane	HE	(5)	ND	(1)	ND	(5)
Chloroform	100	(15)	ND	(3)	ND	(15)
Dibromochloromethane	100	(250)	ND	(50)	ND	(250)
Dibromooethane	NE	(20)	11 UI	(4)	ND	(20)
Methylene Chloride	NE	(20)	ND	(4)	ND	(20)

ALL UNITS ARE ug/l

AL = DHS Action Level  
 EW = Extraction well  
 I = Result differs from last issue of report  
 NA = Not analyzed  
 NS = Normal sample  
 RAD = Radian Corporation, Sacramento  
 U = Unconfirmed, second column not requested  
 (a), (b), (c) = Result qualified due to one of the following analytical considerations:  
 (a) = Coelution  
 (b) = Interference  
 (c) = Random error  
 B = Detected in blank, result not corrected  
 PD = Field Duplicate  
 MCL = DHS maximum contaminant level  
 ND = Not detected at specified detection limit  
 P = Previously confirmed  
 RAS = Radian Analytical Services, Sacramento  
 (2) = Result obtained from secondary column  
 C = Confirmed on second column  
 G = Exceeds calibration range  
 MW = Monitoring well  
 NE = Threshold value not established  
 PMCL = US EPA primary maximum contaminant level

WELL NUMBER									
EW-140			EW-141			EW-141			
Analytes	Maximum Contaminant Level Or Action Level	Detection		Detection		Detection		Detection	
		Result	Limit	Result	Limit	Result	Limit		
Ground Water Zone		Deep A		Deep A		Deep B		Deep B	
Date Sampled		02-Feb-90		02-Mar-90		23-Jan-90		23-Feb-90	
Sampled By		RAD		RAD		RAD		RAD	
Date Analyzed		09-Feb-90		09-Mar-90		24-Jan-90		09-Feb-90	
Lab		RAS		RAS		RAS		RAS	
Field Analysis		NS		NS		NS		NS	
Lab Analysis		NS		NS		NS		NS	
-----									
Tetrachloroethene	5	MCL	ND	(5)	ND	(1)	ND	(1)	ND
Total 1,2-Dichloroethene	16	AL	48. C	(10)	45	PI	19	C	22. C
Total Chlorotoluene	NE		ND	(1300)	ND	(250)	ND	(250)	ND
Trans-1,3-Dichloropropene	NE		ND	(17)	ND	(3 4)	ND	(3 4)	ND
Trichloroethene	5	MCL	120. C	(10)	110	PI	160	C	140 C
Trichlorofluoromethane	150	AL	ND	(2)	ND	(2)	ND	(2)	ND
Vinyl Chloride	0.5	MCL	ND	(10)	ND	(2)	ND	(2)	ND
Bis(2-Chloroisopropyl)Ether	NE		ND	(500)	ND	(100)	ND	(100)	ND
Bis-1,3-Dichloropropene	NE		ND	(10)	ND	(2)	ND	(2)	ND

ALL UNITS ARE WJ/L

- DHS Action Level	- Detected in blank, result not corrected	C	= Confirmed on second column
- Extraction well	- Field Duplicate	G	= Exceeds calibration range
- Result differs from last issue of report	MCL	MW	= Monitoring well
- Not analyzed	ND	NE	= Threshold value not established
- Normal sample	P	PMCL	= US. EPA primary maximum contaminant level
- Radian Corporation, Sacramento	RAS		
- Unconfirmed, second column not requested	(2)		
- Result qualified due to one of the following analytical considerations:			
(a), (b), (c)	(a) - Result obtained from secondary column		
- Coelution	(b) - Interference	(c)	= Random error

TABLE 1-23 (Continued)

WELL NUMBER											
EW-141				EW-144				EW-144			
Ground Water Zone				Deep B				Deep A			
Date Sampled				02-Mar-90				02-Jan-90			
Sampled By				RAD				RAD			
Date Analyzed				05-Mar-90				08-Feb-90			
Lab				RAS				RAS			
Field Analysis				NS				NS			
Lab Analysis				NS				NS			
Maximum Contaminant Level Or Action Level				Detection Limit		Result		Detection Limit		Result	
Analytes				Limit		Result		Limit		Result	
1,1,1,2-Tetrachloroethane				NE	(50)	ND	(250)	ND	(250)	ND	(250)
1,1,1-Trichloroethane				200	(2)	ND	(10)	ND	(10)	11. CI	(7 5)
1,1,1,2,2-Tetrachloroethane				1	(1 5)	ND	(7 5)	ND	(7 5)	ND	(7 5)
1,1,1,2-Trichloroethane				32	(2)	ND	(10)	ND	(10)	ND	(10)
1,1,1-Dichloroethane				NE	(5)	ND	(25)	ND	(25)	ND	(25)
1,1,1-Dichloroethene				6	(2)	ND	(10)	ND	(10)	ND	(10)
1,1,2,3-Trichloropropane				NE	(50)	ND	(250)	ND	(250)	ND	(250)
1,2-Dichlorobenzene				NE	(5)	ND	(25)	ND	(25)	ND	(25)
1,1,2-Dichloroethane				0.5	(1)	ND	(5)	ND	(5)	ND	(5)
1,2-Dichloropropane				5	(1)	ND	(5)	ND	(5)	ND	(5)
1,2-Dichloropropane				130	(3 2)	ND	(16)	ND	(16)	ND	(16)
1,3-Dichlorobenzene				5	(2 4)	ND	(12)	ND	(12)	ND	(12)
1,4-Dichlorobenzene				NE	(50)	ND	(250)	ND	(250)	ND	(250)
1-Chlorohexane				NE	(5)	ND	(25)	ND	(25)	ND	(25)
2-Chloroethylvinylether				NE	(100)	ND	(500)	ND	(500)	ND	(500)
Benzyl Chloride				NE	(50)	ND	(250)	ND	(250)	ND	(250)
Bromobenzene				NE	(1)	ND	(5)	ND	(5)	ND	(5)
Bromodichloromethane				100	(5)	ND	(25)	ND	(25)	ND	(25)
Bromoform				100	(12)	ND	(59)	ND	(59)	ND	(59)
Bromomethane				NE	(1 2)	ND	(6)	ND	(6)	ND	(6)
Carbon Tetrachloride				0.5	(2 5)	ND	(13)	ND	(13)	ND	(13)
Chlorobenzene				NS	(5 2)	ND	(26)	ND	(26)	ND	(26)
Chloroethane				NS	(1)	ND	(5)	ND	(5)	ND	(5)
Chloroform				100	(3)	ND	(15)	ND	(15)	ND	(15)
Chloromethane				NE	(2)	ND	(10)	ND	(10)	ND	(10)
Dibromochloromethane				NE	(50)	ND	(250)	ND	(250)	ND	(250)
Dibromomethane				NE	(4)	ND	(20)	ND	(20)	150 CI(c)	(20)
Methylene Chloride				33. CI		ND		ND			

TABLE 1-23 (Continued)

WELL NUMBER												
EW-141			EW-144			EW-144			EW-144			
Ground Water Zone			Deep B			Deep A			Deep A			
Date Sampled			02-Mar-90			23-Jan-90			02-Feb-90			
Sampled By			RAD			RAD			RAD			
Date Analyzed			05-Mar-90			25-Jan-90			08-Feb-90			
Lab			RAS			RAS			RAS			
Field Analysis			NS			NS			NS			
Lab Analysis			NS			NS			NS			
Analytes			Maximum Contaminant Level Or Action Level			Detection Limit			Detection Limit			
			Result			Result			Result			
			Limit			Limit			Limit			
Tetrachloroethene			5	MCL	ND	(1)	ND	(5)	ND	(5)	ND	(5)
Total 1,2-Dichloroethene			16	AL	21.	CI	21.	C	11.	C	13	CI
Total Chlorotoluenes			NE		ND	(250)	ND	(1300)	ND	(1300)	ND	(10)
Trans-1,3-Dichloropropene			NE		ND	(3.4)	ND	(17)	ND	(17)	ND	(1200)
Trichloroethene			5	MCL	130	CI	ND	C	ND	C	ND	(17)
Trichlorofluoroethane			150	AL	ND	(2)	710	C	820.	C	540	CI
Vinyl Chloride			0.5	MCL	ND	(2)	ND	(10)	ND	(10)	ND	(10)
bis(2-Chloroisopropyl) Ether			NE		ND	(100)	ND	(10)	ND	(10)	ND	(10)
trans-1,3-Dichloropropene			NE		ND	(2)	ND	(500)	ND	(500)	ND	(500)
					ND	(2)	ND	(10)	ND	(10)	ND	(10)

ALL UNITS ARE ug/L

ALL UNITS ARE UG/L

- DHS Action Level  
 - Extraction well  
 - Result differs from last issue of report  
 - Not analyzed  
 - Normal sample  
 - Radian Corporation, Sacramento  
 - Unconfirmed, second column not requested  
 - Result qualified due to one of the following analytical considerations.

(a) = Conclusion  
 (b) = Interference  
 (c) = Random error

B = Detected in blank, result not corrected  
 FD = Field Duplicate  
 MCL = DHS maximum contaminant level  
 ND = Not detected at specified detection limit  
 P = Previously confirmed  
 RAS = Radian Analytical Services, Sacramento  
 (2) = Result obtained from secondary column  
 (b) = Interference

C = Confirmed on second column  
 G = Exceeds calibration range  
 MW = Monitoring well  
 NE = Threshold value not established  
 PNCL = US. EPA primary maximum contaminant level

ALL UNITS ARE UP/L

- DHS Action Level	B	= Detected in blank, result not corrected	C	= Confirmed on second column
- Extraction well	FD	= Field Duplicate	G	= Exceeds calibration range
- Result differs from last issue of report	MCL	= DHS maximum contaminant level	MW	= Monitoring well
- Not analyzed	ND	= Not detected at specified detection limit	NE	= Threshold value not established
- NA	P	= Previously confirmed	PHCL	= US EPA primary maximum contaminant level
- Normal sample	RAS	= Radian Analytical Services, Sacramento		
- Radian Corporation, Sacramento	(2)	= Result obtained from secondary column		
- Unconfirmed, second column not requested		= Result obtained from secondary column		
(a),(b),(c) = Result qualified due to one of the following analytical considerations.	(b)	= Interference	(c)	= Random error
(a) = Coelution				

TABLE 1-23 (Continued)

Analytes	MW-20D			MW-21D			MW-22D			MW-33S		
	Middle			Middle			Deep A			Shallow		
	Date Sampled	Date Analyzed	Lab	Date Sampled	Date Analyzed	Lab	Date Sampled	Date Analyzed	Lab	Date Sampled	Date Analyzed	Lab
Tetrachloroethane	5	MCL	NS	23-Jan-90	25-Jan-90	RAS	31-Jan-90	04-Feb-90	RAS	29-Jan-90	05-Feb-90	RAS
Total 1,2-Dichloroethene	16	AL	NS	23-Jan-90	25-Jan-90	RAS	31-Jan-90	04-Feb-90	RAS	29-Jan-90	05-Feb-90	RAS
Total Chlorotoluene	NE		NS	23-Jan-90	25-Jan-90	RAS	31-Jan-90	04-Feb-90	RAS	29-Jan-90	05-Feb-90	RAS
Trans-1,3-Dichloropropene	5	MCL	NS	23-Jan-90	25-Jan-90	RAS	31-Jan-90	04-Feb-90	RAS	29-Jan-90	05-Feb-90	RAS
Trichloroethene	150	AL	NS	23-Jan-90	25-Jan-90	RAS	31-Jan-90	04-Feb-90	RAS	29-Jan-90	05-Feb-90	RAS
Trichlorofluoromethane	0.5	MCL	NS	23-Jan-90	25-Jan-90	RAS	31-Jan-90	04-Feb-90	RAS	29-Jan-90	05-Feb-90	RAS
Vinyl Chloride	NE		NS	23-Jan-90	25-Jan-90	RAS	31-Jan-90	04-Feb-90	RAS	29-Jan-90	05-Feb-90	RAS
bis(2-Chloroisopropyl)Ether	NE		NS	23-Jan-90	25-Jan-90	RAS	31-Jan-90	04-Feb-90	RAS	29-Jan-90	05-Feb-90	RAS
cis-1,3-Dichloropropene	NE		NS	23-Jan-90	25-Jan-90	RAS	31-Jan-90	04-Feb-90	RAS	29-Jan-90	05-Feb-90	RAS

ALL UNITS ARE ug/L

AL = DHS Action Level  
 EW = Extraction Well  
 I = Result differs from last issue of report  
 NA = Not analyzed  
 NS = Normal sample  
 RAD = Radian Corporation, Sacramento  
 U = Unconfirmed, second column not requested  
 (a),(b),(c) = Result qualified due to one of the following analytical considerations:  
 (a) = Coelution  
 (b) = Interference  
 (c) = Random error

TABLE 1-23 (Continued)

Ground Water Zone Date Sampled Sampled By Date Analyzed Lab Field Analysis Lab Analysis	MW-44S			MW-60			MW-62		
	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow
	30-Jan-90	30-Jan-90	23-Jan-90	01-Feb-90	01-Feb-90	25-Jan-90	25-Jan-90	25-Jan-90	25-Jan-90
	RAD	RAD	RAD	RAS	RAS	RAS	RAS	RAS	RAS
	NS	NS	NS	NS	NS	NS	NS	NS	NS
	NS	NS	NS	NS	NS	NS	NS	NS	NS
Analytes	Maximum Contaminant Level Or Action Level			Detection Limit			Detection Limit		
	Level	Result	Limit	Result	Limit	Result	Limit	Result	Limit
1,1,1,2-Tetrachloroethane	NE	ND	(5)	ND	(5)	ND	(5)	ND	(5)
1,1,1-Trichloroethane	200	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)
1,1,2,2-Tetrachloroethane	1	ND	(0.15)	ND	(0.15)	ND	(0.15)	ND	(0.15)
1,1,2-Trichloroethane	32	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)
1,1-Dichloroethane	NE	ND	(0.5)	ND	(0.5)	ND	(0.5)	ND	(0.5)
1,1-Dichloroethane	6	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)
1,2,3-Trichloropropane	NE	ND	(5)	ND	(5)	ND	(5)	ND	(5)
1,2-Dichlorobenzene	NE	ND	(0.5)	ND	(0.5)	ND	(0.5)	ND	(0.5)
1,2-Dichloroethane	0.5	ND	(0.1)	ND	(0.1)	ND	(0.1)	ND	(0.1)
1,2-Dichloropropane	5	ND	(0.1)	ND	(0.1)	ND	(0.1)	ND	(0.1)
1,3-Dichlorobenzene	130	ND	(0.32)	ND	(0.32)	ND	(0.32)	ND	(0.32)
1,4-Dichlorobenzene	5	ND	(0.24)	ND	(0.24)	ND	(0.24)	ND	(0.24)
1-Chlorohexane	NE	ND	(5)	ND	(5)	ND	(5)	ND	(5)
2-Chloroethylvinyl ether	NE	ND	(0.5)	ND	(0.5)	ND	(0.5)	ND	(0.5)
Benzyl Chloride	NE	ND	(10)	ND	(10)	ND	(10)	ND	(10)
Bromobenzene	NE	ND	(5)	ND	(5)	ND	(5)	ND	(5)
Bromodichloroethane	100	ND	(0.1)	ND	(0.1)	ND	(0.1)	ND	(0.1)
Bromoform	100	ND	(0.5)	ND	(0.5)	ND	(0.5)	ND	(0.5)
Bromoethane	NE	ND	(1.2)	ND	(1.2)	ND	(1.2)	ND	(1.2)
Carbon Tetrachloride	0.5	ND	(0.12)	ND	(0.12)	ND	(0.12)	ND	(0.12)
Chloroethane	30	ND	(0.25)	ND	(0.25)	ND	(0.25)	ND	(0.25)
Chloroethane	NE	ND	(0.52)	ND	(0.52)	ND	(0.52)	ND	(0.52)
Chloroform	100	ND	(0.1)	ND	(0.1)	ND	(0.1)	ND	(0.1)
Chloroethane	NE	ND	(0.3)	ND	(0.3)	ND	(0.3)	ND	(0.3)
Dibromochloromethane	100	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)
Dibromomethane	NE	ND	(5)	ND	(5)	ND	(5)	ND	(5)
Methylene Chloride	NE	ND	(0.4)	ND	(0.4)	ND	(0.4)	ND	(0.4)

ALL UNITS ARE ug/L

AL = DHS Action Level  
 EN = Extraction well  
 I = Result differs from last issue of report  
 NA = Not analyzed  
 NS = Normal sample  
 RAD = Radian Corporation, Sacramento  
 U = Unconfirmed, second column not requested  
 (a), (b), (c) = Result qualified due to one of the following analytical considerations:  
 (a) = Coelution  
 (b) = Interference  
 (c) = Random error

B = Detected in blank, result not corrected  
 FD = Field Duplicate  
 MCL = DHS maximum contaminant level  
 ND = Not detected at specified detection limit  
 P = Previously confirmed  
 RAS = Radian Analytical Services, Sacramento  
 (2) = Result obtained from secondary column  
 C = Confirmed on second column  
 G = Exceeds calibration range  
 MW = Monitoring well  
 NE = Threshold value not established  
 PMCL = US EPA primary maximum contaminant level

TABLE 1-23 (Continued)

Ground Water Zone Date Sampled Sampled By Date Analyzed Lab Field Analysis Lab Analysis	MW-44S			MW-60			MW-62			MW-62		
	Shallow	30-Jan-90	Shallow	30-Jan-90	Shallow	23-Jan-90	Shallow	23-Jan-90	Shallow	23-Jan-90	Shallow	23-Jan-90
	RAD		RAD		RAD		RAD		RAD		RAD	
	01-Feb-90		01-Feb-90		01-Feb-90		01-Feb-90		01-Feb-90		01-Feb-90	
	RAS		RAS		RAS		RAS		RAS		RAS	
	NS		NS		NS		NS		NS		NS	
	NS		NS		NS		NS		NS		NS	

Analytes	Maximum Contaminant Level Or Action Level			Detection Limit			Detection Limit			Detection Limit		
	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit
Tetrachloroethene	5 MCL	(0.1)	ND	(0.1)	ND	(0.1)	ND	(0.1)	ND	(0.1)	ND	(0.1)
Total 1,2-Dichloroethene	16 AL	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)
Total Chlorotoluenes	NE	(25)	ND	(25)	ND	(25)	ND	(25)	ND	(25)	ND	(25)
Trans-1,3-Dichloropropene	5 MCL	(0.34)	ND	(0.34)	ND	(0.34)	ND	(0.34)	ND	(0.34)	ND	(0.34)
Trichloroethene	22 (b)	(0.2)	1 9 (c)	(0.2)	1 2 C	(0.2)	1 1 C	(0.2)	1 1 C	(0.2)	1 1 C	(0.2)
Trichlorofluoromethane	150 AL	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)
Vinyl Chloride	0.5 MCL	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)
bis(2-Chloroisopropyl)Ether	NE	(10)	ND	(10)	ND	(10)	ND	(10)	ND	(10)	ND	(10)
cis-1,3-Dichloropropene	NE	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)

ALL UNITS ARE ug/L

AL = DHS Action Level  
 SW = Extraction well  
 I = Result differs from last issue of report  
 NA = Not analyzed  
 NS = Normal sample  
 RAD = Radian Corporation, Sacramento  
 U = Unconfirmed, second column not requested  
 (c), (b), (c) = Result qualified due to one of the following analytical considerations:  
 (a) = Coelution  
 (b) = Interference  
 (c) = Random error

B = Detected in blank, result not corrected  
 PD = Field Duplicate  
 MCL = DHS maximum contaminant level  
 ND = Not detected at specified detection limit  
 P = Previously confirmed  
 RAS = Radian Analytical Services, Sacramento  
 (2) = Result obtained from secondary column

C = Confirmed on second column  
 G = Exceeds calibration range  
 MW = Monitoring well  
 NE = Threshold value not established  
 PMCL = US EPA primary maximum contaminant level



TABLE 1-23 (Continued)

Ground Water Zone Date Sampled Sampled By Date Analyzed Lab Field Analysis Lab Analysis	Maximum Contaminant Level Or Action Level	MW-75			MW-115			MW-128			MW-128		
		Analytes	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit
1,1,1,2-Tetrachloroethane	NE		(50)	ND	(5)	ND	(5000)	ND	(5000)	ND	(5000)	ND	(5000)
1,1,1-Trichloroethane	200	MCL	(2)	ND	(0 2)	ND	(200)	ND	(200)	ND	(200)	ND	(200)
1,1,2,2-Tetrachloroethane	1	MCL	(1 5)	ND	(0 15)	ND	(150)	250 (a)	(150)	250 (a)	(150)	250 (a)	(150)
1,1,2-Trichloroethane	32	MCL	(2)	ND	(0 2)	ND	(200)	ND	(200)	ND	(200)	ND	(200)
1,1-Dichloroethane	NE		(5)	ND	(0 5)	ND	(500)	ND	(500)	ND	(500)	ND	(500)
1,1-Dichloroethane	6	MCL	(2)	ND	(0 2)	ND	(200)	ND	(200)	ND	(200)	ND	(200)
1,2,3-Trichloropropane	NE		(50)	ND	(5)	ND	(5000)	ND	(5000)	ND	(5000)	ND	(5000)
1,2-Dichlorobenzene	NE		(5)	ND	(0 5)	ND	(500)	ND	(500)	ND	(500)	ND	(500)
1,2-Dichloroethane	0.5	MCL	(1)	ND	(0 1)	ND	(100)	ND	(100)	ND	(100)	ND	(100)
1,2-Dichloropropane	5	PMCL	(1)	ND	(0 1)	ND	(100)	ND	(100)	ND	(100)	ND	(100)
1,3-Dichlorobenzene	130	MCL	(3 2)	ND	(0 32)	ND	(320)	ND	(320)	ND	(320)	ND	(320)
1,4-Dichlorobenzene	5	MCL	(2 4)	ND	(0 24)	ND	(240)	ND	(240)	ND	(240)	ND	(240)
1-Chlorohexane	NE		(50)	ND	(5)	ND	(5000)	ND	(5000)	ND	(5000)	ND	(5000)
2-Chloroethylvinylethane:	NE		(5)	ND	(0 5)	ND	(500)	ND	(500)	ND	(500)	ND	(500)
Benzyl Chloride	NE		(100)	ND	(10)	ND	(10000)	ND	(10000)	ND	(10000)	ND	(10000)
Bromobenzene	NE		(50)	ND	(5)	ND	(5000)	ND	(5000)	ND	(5000)	ND	(5000)
Bromodichloromethane	100	PMCL	(1)	ND	(0 1)	ND	(100)	ND	(100)	ND	(100)	ND	(100)
Bromoform	100	PMCL	(5)	ND	(0 5)	ND	(500)	ND	(500)	ND	(500)	ND	(500)
Bromomethane	NE		(12)	ND	(1 2)	ND	(1200)	ND	(1200)	ND	(1200)	ND	(1200)
Carbon Tetrachloride	0.5	MCL	(1.2)	ND	(0 12)	ND	(120)	ND	(120)	ND	(120)	ND	(120)
Chlorobenzene	30	AL	(2.5)	ND	(0 25)	ND	(250)	ND	(250)	ND	(250)	ND	(250)
Chloroethane	NE		(5 2)	ND	(0 52)	ND	(520)	ND	(520)	ND	(520)	ND	(520)
Chloroform	100	PMCL	(1)	ND	(0 1)	ND	(100)	ND	(100)	ND	(100)	ND	(100)
Chloromethane	NE		(3)	ND	(0 3)	ND	(300)	ND	(300)	ND	(300)	ND	(300)
Dibromochloromethane	100	PMCL	(2)	ND	(0 2)	ND	(200)	ND	(200)	ND	(200)	ND	(200)
Dibromomethane	NE		(50)	ND	(5)	ND	(5000)	ND	(5000)	ND	(5000)	ND	(5000)
Methylene Chloride	NE		(4)	ND	(0 4)	ND	(400)	ND	(400)	ND	(400)	ND	(400)

ALL UNITS ARE ug/L

AL = DHS Action Level;  
 TW = Extraction well  
 Y = Result differs from last issue of report  
 NA = Not analyzed  
 NS = Normal sample  
 RAD = Radian Corporation, Sacramento  
 U = Unconfirmed, second column not requested  
 (a), (b), (c) = Result qualified due to one of the following analytical considerations  
 (a) = Coelution  
 (b) = Interference  
 (c) = Random error  
 B = Detected in blank, result not corrected  
 FD = Field Duplicate  
 MCL = DHS maximum contaminant level  
 ND = Not detected at specified detection limit  
 P = Previously confirmed  
 RAS = Radian Analytical Services, Sacramento  
 (2) = Result obtained from secondary column  
 C = Confirmed on second column  
 G = Exceeds calibration range  
 ME = Monitoring well  
 NE = Threshold value not established  
 PMCL = US EPA primary maximum contaminant level

TABLE 1-23 (Continued)

		WELL NUMBER					
		MW-75		MW-115		MW-128	
Ground Water Zone		Middle		Middle		Shallow	
Date Sampled		05-Feb-90		18-Jan-90		30-Jan-90	
Sampled By		RAD		RAD		RAD	
Date Analyzed		09-Feb-90		19-Jan-90		07-Feb-90	
Lab		RAS		RAS		RAS	
Field Analysis		NS		NS		FD	
Lab Analysis		NS		NS		NS	
		MW-75		MW-115		MW-128	
		Middle	Middle	Middle	Middle	Shallow	Shallow
		05-Feb-90	18-Jan-90	18-Jan-90	18-Jan-90	30-Jan-90	30-Jan-90
		RAD	RAD	RAD	RAD	RAD	RAD
		09-Feb-90	19-Jan-90	19-Jan-90	19-Jan-90	07-Feb-90	07-Feb-90
		RAS	RAS	RAS	RAS	RAS	RAS
		NS	NS	NS	NS	FD	NS
		NS	NS	NS	NS	NS	NS
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		NS	NS				

TABLE 1-23 (Cont Inued )

Ground Water Zone Date Sampled Sampled By Date Analyzed Lab Field Analysis Lab Analysis	MW-129			MW-130			MW-131			MW-133		
	Maximum Contaminant Level Or Action Level	Detection		Maximum Contaminant Level Or Action Level	Detection		Maximum Contaminant Level Or Action Level	Detection		Maximum Contaminant Level Or Action Level	Detection	
		Result	Limit		Result	Limit		Result	Limit		Result	Limit
Middle	Deep A	Shallow	Deep B									
19-Jan-90	19-Jan-90	26-Jan-90	22-Jan-90									
RAD	RAD	RAD	RAD									
21-Jan-90	21-Jan-90	31-Jan-90	24-Jan-90									
RAS	PAS	RAS	RAS									
NS	NS	NS	NS									
NS	NS	NS	NS									
Lab Analysis												
Lab Analysis												
Analytes												
1,1,1,2-Tetrachloroethane	NE	ND	(100)	ND	(5)	ND	(25)	ND	(5)	ND	(5)	(5)
1,1,1,1-Trichloroethane	200	ND	(4)	0 20 P	(0 2)	ND	(1)	ND	(1)	3 4 C	(0 2)	(0 2)
1,1,1,2-Tetrachloroethane	1	MCL	(3)	ND	(0 15)	ND	(0 15)	ND	(0 15)	ND	(0 15)	(0 15)
1,1,1,2-Trichloroethane	32	MCL	(4)	ND	(0 2)	ND	(1)	ND	(1)	ND	(0 2)	(0 2)
1,1,1-Dichloroethane	NE	ND	(10)	1 8 P	(0 5)	ND	(2 5)	ND	(2 5)	ND	(0 5)	(0 5)
1,1,1-Dichloroethane	6	MCL	(4)	ND	(0 2)	ND	(1)	ND	(1)	ND	(0 2)	(0 2)
1,1,2,3-Trichloropropane	NE	ND	(100)	ND	(5)	ND	(25)	ND	(5)	ND	(5)	(5)
1,1,2-Dichlorobenzene	NE	ND	(10)	ND	(0 5)	ND	(2 5)	ND	(2 5)	ND	(0 5)	(0 5)
1,1,2-Dichloroethane	0 5	MCL	(2)	ND	(0 1)	ND	(0 5)	ND	(0 5)	ND	(0 1)	(0 1)
1,1,2-Dichloropropane	5	PHCL	(2)	ND	(0 1)	ND	(0 5)	ND	(0 5)	ND	(0 1)	(0 1)
1,1,3-Dichlorobenzene	130	MCL	(6 4)	ND	(0 32)	ND	(1 6)	ND	(1 6)	ND	(0 32)	(0 32)
1,1,4-Dichlorobenzene	5	MCL	(4 8)	ND	(0 24)	ND	(1 2)	ND	(1 2)	ND	(0 24)	(0 24)
1-Chlorohexane	NE	ND	(100)	ND	(5)	ND	(25)	ND	(5)	ND	(5)	(5)
2-Chloroethylvinylether	NE	ND	(10)	ND	(0 5)	ND	(2 5)	ND	(2 5)	ND	(0 5)	(0 5)
Benzyl Chloride	NE	ND	(200)	ND	(10)	ND	(50)	ND	(10)	ND	(5)	(5)
Bromobenzene	NE	ND	(100)	ND	(5)	ND	(25)	ND	(25)	ND	(5)	(5)
Bromodichloromethane	100	PHCL	(2)	ND	(0 1)	ND	(0 5)	ND	(0 5)	ND	(0 1)	(0 1)
Bromoform	100	PHCL	(10)	ND	(0 5)	ND	(2 5)	ND	(2 5)	ND	(0 5)	(0 5)
Bromomethane	NE	ND	(24)	ND	(1 2)	ND	(5 9)	ND	(5 9)	ND	(1 2)	(1 2)
Carbon Tetrachloride	0 5	MCL	(2 4)	ND	(0 12)	ND	(0 6)	ND	(0 6)	ND	(0 12)	(0 12)
Chlorobenzene	30	AL	(5)	ND	(0 25)	ND	(1 3)	ND	(1 3)	ND	(0 25)	(0 25)
Chloroethane	NE	ND	(10)	ND	(0 52)	ND	(2 6)	ND	(2 6)	ND	(0 52)	(0 52)
Chloroform	100	PHCL	(2)	0 20 P	(0 1)	ND	(0 5)	ND	(0 5)	ND	(0 1)	(0 1)
Chloromethane	NE	ND	(6)	ND	(0 3)	ND	(1 5)	ND	(1 5)	ND	(0 3)	(0 3)
Dibromochloromethane	100	PHCL	(4)	ND	(0 2)	ND	(1)	ND	(1)	ND	(0 2)	(0 2)
Dibromomethane	NE	ND	(100)	ND	(5)	ND	(25)	ND	(5)	ND	(5)	(5)
Methylene Chloride	NE	ND	(8)	ND	(0 4)	ND	(2)	ND	(2)	ND	(0 4)	(0 4)
ALL UNITS ARE ug/L												

AL = DHS Action Level  
 EW = Extraction well  
 I = Result differs from last issue of report  
 NA = Not analyzed  
 NS = Normal sample  
 RAD = Radon Corporation, Sacramento  
 U = Unconfirmed, second column not requested  
 (a), (b), (c) = Result qualified due to one of the following analytical considerations.  
 (a) = Coelution  
 (b) = Interference  
 (c) = Result obtained from secondary column  
 (2) = Result obtained from secondary column  
 RAS = Radon Analytical Services, Sacramento  
 P = Previously confirmed  
 MCL = Not detected at specified detection limit  
 B = Detected in blank, result not corrected  
 FD = Field Duplicate  
 MCL = DHS maximum contaminant level  
 = DHS maximum contaminant level  
 = Field Duplicate  
 = Detected in blank, result not corrected  
 C = Confirmed on second column  
 G = Exceeds calibration range  
 MW = Monitoring well  
 NE = Threshold value not established  
 PMCL = US EPA primary maximum contaminant level  
 (c) = Random error

TABLE 1-23 (Continued)

Ground Water Zone Date Sampled Sampled By Date Analyzed Lab Field Analysis Lab Analysis	WELL NUMBER											
	MW-129				MW-130				MW-131			
	Middle 19-Jan-90 RAD 21-Jan-90 RAS NS NS	Deep A 19-Jan-90 RAD 21-Jan-90 RAS NS NS	Deep A 19-Jan-90 RAD 21-Jan-90 RAS NS NS	Deep A 19-Jan-90 RAD 21-Jan-90 RAS NS NS	Shallow 26-Jan-90 RAD 31-Jan-90 RAS NS NS	Shallow 26-Jan-90 RAD 31-Jan-90 RAS NS NS	Shallow 26-Jan-90 RAD 31-Jan-90 RAS NS NS	Shallow 26-Jan-90 RAD 31-Jan-90 RAS NS NS	Shallow 26-Jan-90 RAD 31-Jan-90 RAS NS NS	Shallow 26-Jan-90 RAD 31-Jan-90 RAS NS NS	Shallow 26-Jan-90 RAD 31-Jan-90 RAS NS NS	Shallow 26-Jan-90 RAD 31-Jan-90 RAS NS NS
Analytes	Maximum Contaminant Level Or Action Level	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Detection Limit
Tetrachloroethene	5 MCL	ND	(2)	0.11 P	(0.1)	ND	(0.5)	ND	(0.1)	ND	(0.1)	(0.1)
Total 1,2-Dichloroethene	16 AL	ND	(4)	0.65 P	(0.2)	ND	(1)	ND	(0.2)	ND	(0.2)	(0.2)
Total Chlorotoluene	NE	ND	(500)	ND	(25)	ND	(130)	ND	(25)	ND	(25)	(25)
Trans-1,3-Dichloropropene	NE	ND	(6.8)	ND	(0.34)	ND	(1.7)	ND	(0.34)	ND	(0.34)	(0.34)
Trichloroethene	5 MCL	290. P	(4)	3.4 P	(0.2)	ND	(1)	4.9 C	(1)	ND	(0.2)	(0.2)
Trichlorofluoromethane	150 AL	ND	(4)	ND	(0.2)	ND	(1)	ND	(0.2)	ND	(0.2)	(0.2)
Vinyl Chloride	0.5 MCL	ND	(4)	ND	(0.2)	ND	(1)	ND	(0.2)	ND	(0.2)	(0.2)
bis(2-Chloroisopropyl) Ether	NE	ND	(200)	ND	(10)	ND	(50)	ND	(10)	ND	(10)	(10)
cis-1,3-Dichloropropene	NE	ND	(4)	ND	(0.2)	ND	(1)	ND	(0.2)	ND	(0.2)	(0.2)

ALL UNITS ARE µg/L

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(b) = Interference  
(c) = Random error  
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FD = Field Duplicate  
MCL = DHS maximum contaminant level  
ND = Not detected at specified detection limit  
P = Previously confirmed  
RAS = Radian Analytical Services, Sacramento  
(2) = Result obtained from secondary column  
C = Confirmed on second column  
G = Exceeds calibration range  
MW = Monitoring well  
NE = Threshold value not established  
PHCL = US. EPA primary maximum contaminant level

TABLE 1 23 (Continued)

Ground Water Zone Date Sampled Sampled by Date Analyzed Lab Field Analysis Lab Analysis	WELL NUMBER											
	MW-134				MW-135				MW-136			
	Deep A 15-Jan-90 RAD 16-Jan-90 RAS NS NS	Middle 22-Jan-90 RAD 23-Jan-90 RAS NS NS	Middle 22-Jan-90 RAD 23-Jan-90 RAS FD NS	Deep B 30-Jan-90 RAD 01-Feb-90 RAS NS NS								
Maximum Contaminant Level Or Action Level												
Analytes	Maximum Contaminant Level Or Action Level	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Detection Limit
1,1,1,2-Tetrachloroethane	NE	ND	(5)	ND	(5)	ND	(25)	ND	(25)	ND	(100)	(100)
1,1,1-Trichloroethane	200	MCL	ND	ND	(0.2)	ND	(0.2)	ND	(1)	ND	(4)	(4)
1,1,2,2-Tetrachloroethane	1	MCL	ND	ND	(0.15)	ND	(0.15)	ND	(0.75)	ND	(3)	(3)
1,1,2-Trichloroethane	32	MCL	ND	ND	(0.2)	ND	(0.2)	ND	(1)	ND	(4)	(4)
1,1-Dichloroethane	NE	ND	ND	ND	(0.5)	ND	(0.5)	ND	(2.5)	ND	(10)	(10)
1,1-Dichloroethane	6	MCL	ND	ND	(0.2)	ND	(0.2)	ND	(1)	ND	(4)	(4)
1,2,3-Trichloropropane	NE	ND	ND	ND	(5)	ND	(5)	ND	(25)	ND	(100)	(100)
1,2-Dichlorobenzene	NE	ND	ND	ND	(0.5)	ND	(0.5)	ND	(2.5)	ND	(10)	(10)
1,2-Dichloroethane	0.5	MCL	ND	ND	(0.1)	1.0 C	(0.1)	2.5 C	(0.5)	ND	(2)	(2)
1,2-Dichloropropane	5	PHCL	ND	ND	(0.1)	ND	(0.1)	ND	(0.5)	ND	(2)	(2)
1,3-Dichlorobenzene	130	MCL	ND	ND	(0.32)	ND	(0.32)	ND	(1.6)	ND	(6.4)	(6.4)
1,4-Dichlorobenzene	5	MCL	ND	ND	(0.24)	ND	(0.24)	ND	(1.2)	ND	(4.8)	(4.8)
1-Chlorobenzene	NE	ND	ND	ND	(5)	ND	(5)	ND	(25)	ND	(100)	(100)
2-Chloroethylvinylether	NE	ND	ND	ND	(0.5)	ND	(0.5)	ND	(2.5)	ND	(10)	(10)
Benzyl Chloride	NE	ND	ND	ND	(10)	ND	(10)	ND	(50)	ND	(200)	(200)
Bromobenzene	NE	ND	ND	ND	(5)	ND	(5)	ND	(25)	ND	(100)	(100)
Bromodichloromethane	100	PHCL	ND	ND	(0.1)	ND	(0.1)	ND	(0.5)	ND	(2)	(2)
Bromoform	100	PHCL	ND	ND	(0.5)	ND	(0.5)	ND	(2.5)	ND	(10)	(10)
Bromochloroethane	NE	ND	ND	ND	(1.2)	ND	(1.2)	ND	(5.9)	ND	(24)	(24)
Carbon Tetrachloride	0.5	MCL	ND	ND	(0.12)	ND	(0.12)	ND	(0.6)	ND	(2.4)	(2.4)
Chlorobenzene	30	AL	ND	ND	(0.25)	ND	(0.25)	ND	(1.3)	ND	(5)	(5)
Chloroethane	NE	ND	ND	ND	(0.52)	ND	(0.52)	ND	(2.6)	ND	(10)	(10)
Chloroform	100	PHCL	ND	ND	(0.1)	0.91 C	(0.1)	ND	(0.5)	ND	(2)	(2)
Chloromethane	NE	ND	ND	ND	(0.3)	ND	(0.3)	ND	(1.5)	ND	(6)	(6)
Dibromochloromethane	NE	ND	ND	ND	(0.2)	ND	(0.2)	ND	(1)	ND	(4)	(4)
Dibromomethane	100	PHCL	ND	ND	(5)	ND	(5)	ND	(25)	ND	(100)	(100)
Methylene Chloride	NE	ND	ND	ND	(0.4)	ND	(0.4)	ND	(2)	ND	(8)	(8)

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MW = Monitoring well  
NE = Threshold value not established  
PHCL = US EPA primary maximum contaminant level  
(c) = Random error

ALL UNITS ARE W4/L

- DHS Action Level  
 - Extraction well  
 - Result differs from last issue of report  
 - Not analysed  
 - Normal sample  
 - Radian Corporation, Sacramento  
 - Unconfirmed, second column not requested  
 - Result qualified due to one of the following analytical considerations:  
 - Coelution  
 - Interference  
 - Result obtained from secondary column  
 - Radian Analytical Services, Sacramento  
 - Previously confirmed  
 - Not detected at specified detection limit  
 - DHS maximum contaminant level  
 - Field Duplicate  
 - Detected in blank, result not corrected  
 - Confirmed on second column  
 - Exceeds calibration range  
 - Monitoring well  
 - Threshold value not established  
 - US EPA primary maximum contaminant level  
 - Random error

TABLE 1-23 (Continued)

Ground Water Zone Date Sampled Sampled By Date Analyzed Lab Field Analysis Lab Analysis	MW-138			MW-139			MW-142			MW-143		
	Maximum Contaminant Level Or Action Level	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result	
Analytes												
1,1,1,2-Tetrachloroethane	NE	(5)	ND	(50)	ND	(5)	ND	(5)	ND	(5)	ND	
1,1,1-Trichloroethane	200	(0.2)	ND	(2)	ND	(2)	ND	(2)	ND	(0.2)	ND	
1,1,2,2-Tetrachloroethane	1	(0.15)	ND	(1.5)	ND	(1.5)	ND	(0.15)	ND	(0.15)	ND	
1,1,1,2-Trichloroethane	32	(0.2)	ND	(2)	ND	(2)	ND	(0.2)	ND	(0.2)	ND	
1,1-Dichloroethane	NE	(0.5)	ND	(5)	20	(5)	ND	(0.5)	ND	(0.5)	ND	
1,1-Dichloroethane	6	(0.2)	ND	(2)	ND	(2)	ND	(0.2)	ND	(0.2)	ND	
1,1,2,3-Trichloropropane	NE	(5)	ND	(50)	ND	(50)	ND	(5)	ND	(5)	ND	
1,2-Dichlorobenzene	NE	(0.5)	ND	(5)	ND	(5)	ND	(0.5)	ND	(0.5)	ND	
1,2-Dichloroethane	0.5	(0.1)	ND	(1)	ND	(1)	ND	(0.1)	ND	(0.1)	ND	
1,2-Dichloropropane	5	(0.1)	ND	(1)	ND	(1)	ND	(0.1)	ND	(0.1)	ND	
1,3-Dichlorobenzene	130	(0.32)	ND	(3.2)	ND	(3.2)	ND	(0.32)	ND	(0.32)	ND	
1,4-Dichlorobenzene	5	(0.24)	ND	(2.4)	ND	(2.4)	ND	(0.24)	ND	(0.24)	ND	
1-Chlorohexane	NE	(5)	ND	(50)	ND	(50)	ND	(5)	ND	(5)	ND	
2-Chloroethylvinylether	NE	(0.5)	ND	(5)	ND	(5)	ND	(0.5)	ND	(0.5)	ND	
Benzyl Chloride	NE	(10)	ND	(100)	ND	(100)	ND	(10)	ND	(10)	ND	
Bromobenzene	NE	(5)	ND	(50)	ND	(50)	ND	(5)	ND	(5)	ND	
Bromodichloromethane	100	(0.1)	ND	(1)	ND	(1)	ND	(0.1)	ND	(0.1)	ND	
Bromoform	100	(0.5)	ND	(5)	ND	(5)	ND	(0.5)	ND	(0.5)	ND	
Bromomethane	NE	(1.2)	ND	(12)	ND	(12)	ND	(1.2)	ND	(1.2)	ND	
Carbon Tetrachloride	0.5	(0.12)	ND	(1.2)	ND	(1.2)	ND	(0.12)	ND	(0.12)	ND	
Chlorobenzene	30	(0.25)	ND	(2.5)	ND	(2.5)	ND	(0.25)	ND	(0.25)	ND	
Chloroethane	NE	(0.52)	ND	(5.2)	ND	(5.2)	ND	(0.52)	ND	(0.52)	ND	
Chloroform	100	(0.1)	ND	(1)	ND	(1)	ND	(0.1)	ND	(0.1)	ND	
Chloromethane	NE	(0.3)	ND	(3)	ND	(3)	ND	(0.3)	ND	(0.3)	ND	
Dibromochloromethane	100	(0.2)	ND	(2)	ND	(2)	ND	(0.2)	ND	(0.2)	ND	
Dibromomethane	NE	(5)	ND	(50)	ND	(50)	ND	(5)	ND	(5)	ND	
Methylene Chloride	NE	(0.4)	ND	(4)	ND	(4)	ND	(0.4)	ND	(0.4)	ND	

ALL UNITS ARE ug/L

AL = DHS Action Level  
EW = Extraction well  
I = Result differs from last issue of report  
NA = Not analyzed  
NS = Normal sample  
RAD = Radian Corporation, Sacramento  
U = Unconfirmed, second column not requested  
(a), (b), (c) = Result qualified due to one of the following analytical considerations:  
(a) = Coelution  
(b) = Interference  
(c) = Random error

B = Detected in blank, result not corrected  
BD = Field Duplicate  
MCL = DHS maximum contaminant level  
ND = Not detected at specified detection limit  
P = Previously confirmed  
RAS = Radian Analytical Services, Sacramento  
U = Unconfirmed, second column not requested  
(2) = Result obtained from secondary column

C = Confirmed on second column  
G = Exceeds calibration range  
MW = Monitoring well  
NE = Threshold value not established  
PMCL = US EPA primary maximum contaminant level

TABLE 1-23 (Continued)

		WELL NUMBER			
		MW-138	MW-139	MW-142	MW-143
Ground Water Zone		Deep B	Shallow	Deep A	Deep A
Date Sampled		29-Jan-90	26-Jan-90	29-Jan-90	16-Jan-90
Sampled By		RAD	RAD	RAD	RAD
Date Analyzed		04-Feb-90	31-Jan-90	05-Feb-90	17-Jan-90
Lab		RAS	RAS	RAS	RAS
Field Analysis		NS	NS	NS	NS
Lab Analysis		NS	NS	NS	NS
		Maximum Contaminant Level Or Action Level			
		Detection Limit		Detection Limit	
		Result	Limit	Result	Limit
Analytes		Result	Limit	Result	Limit
Tetrachloroethene	5 MCL	ND	(0.1)	ND	(0.1)
Total 1,2-Dichloroethene	16 AL	ND	(0.2)	ND	(0.2)
Total Chlorotoluene	NE	ND	(25)	ND	(25)
Trans-1,3-Dichloropropene	NE	ND	(0.34)	ND	(0.34)
Trichloroethene	5 MCL	ND	(0.2)	ND	(0.2)
Trichlorofluoroethane	150 AL	ND	(0.2)	ND	(0.2)
Vinyl Chloride	0.5 MCL	ND	(0.2)	ND	(0.2)
bis(2-Chloroisopropyl)Ether	NE	ND	(10)	ND	(10)
cis-1,3-Dichloropropene	NE	ND	(0.2)	ND	(0.2)

ALL UNITS ARE ug/L

AL = DHS Action Level  
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 NA = Not analyzed  
 NS = Normal sample  
 RAD = Radian Corporation, Sacramento  
 U = Unconfirmed, second column not requested  
 (a), (b), (c) = Result qualified due to one of the following analytical considerations:  
 (a) = Coelution  
 (b) = Interference  
 (c) = Random error

B = Detected in blank, result not corrected  
 FD = Field Duplicate  
 MCL = DHS maximum contaminant level  
 ND = Not detected at specified detection limit  
 P = Previously confirmed  
 RAS = Radian Analytical Services, Sacramento  
 (2) = Result obtained from secondary column

C = Confirmed on second column  
 G = Exceeds calibration range  
 MW = Monitoring well  
 NE = Threshold value not established  
 PMCL = US. EPA primary maximum contaminant level



TABLE 1-24. MASTER LOG OF WELLS SAMPLED FOR METHOD 8020 FOR AREA C AND ADJACENT ON-BASE AREAS,  
GROUNDWATER SAMPLING AND ANALYSIS PROGRAM,  
JANUARY TO MARCH 1990, McCLELLAN AIR FORCE BASE

Ground Water Zone Date Sampled Sampled By Date Analyzed Lab Field Analysis Lab Analysis	EW-137			EW-137			EW-140			EW-140		
	Deep A	23-Jan-90	Deep A	02-Mar-90	Deep A	23-Jan-90	Deep A	02-Mar-90	Deep A	02-Mar-90	Deep A	02-Mar-90
	RAD		RAD		RAD		RAD		RAD		RAD	
	RAS	24-Jan-90	RAS	05-Mar-90	RAS	24-Jan-90	RAS	05-Mar-90	RAS	05-Mar-90	RAS	05-Mar-90
	NS		NS		NS		NS		NS		NS	
	NS		NS		NS		NS		NS		NS	
Analytes	Maximum Contaminant Level Or Action Level			Detection Limit			Detection Limit			Detection Limit		
	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
1,2-Dichlorobenzene	NE	ND	ND	(8)	ND	ND	(20)	ND	ND	(4)	ND	(4)
1,3-Dichlorobenzene	130	ND	ND	(8)	ND	ND	(20)	ND	ND	(4)	ND	(4)
1,4-Dichlorobenzene	5	ND	ND	(6)	ND	ND	(15)	ND	ND	(3)	ND	(3)
Benzene	1	ND	ND	(4)	ND	ND	(10)	ND	ND	(2)	ND	(2)
Chlorobenzene	30	ND	ND	(4)	ND	ND	(10)	ND	ND	(2)	ND	(2)
Ethylbenzene	680	ND	ND	(4)	ND	ND	(10)	ND	ND	(2)	ND	(2)
Toluene	NE	ND	ND	(4)	ND	ND	(10)	ND	ND	(2)	ND	(2)
Total Xylenes	1750	ND	ND	(4)	ND	ND	(10)	ND	ND	(2)	ND	(2)

ALL UNITS ARE ug/L

AL = DHS Action Level  
EW = Extractor Well  
I = Result differs from last issue of report  
NA = Not analyzed  
NS = Normal sample  
RAD = Radian Corporation, Sacramento  
U = Unconfirmed, second column not requested  
(a),(b),(c) = Result qualified due to one of the following analytical considerations:  
(a) = Coelution  
(b) = Interference  
(c) = Random error

B = Detected in blank, result not corrected  
FD = Field Duplicate  
MCL = DHS maximum contaminant level  
ND = Not detected at specified detection limit  
P = Previously confirmed  
RAS = Radian Analytical Services, Sacramento  
(2) = Result obtained from secondary column

C = Confirmed on second column  
G = Exceeds calibration range  
MW = Monitoring well  
NE = Threshold value not established  
PMCL = US EPA primary maximum contaminant level

ALL UNITS ARE UG/L

1-109

Ground Water Zone	MW-33S				MW-62				MW-128			
	WELL NUMBER				WELL NUMBER				WELL NUMBER			
	Maximum Contaminant Level Or Action Level	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit
Date Sampled												
Date Analysed												
Lab												
Field Analysis												
Lab Analysis												
Analyses												
1,2-Dichlorobenzene	HE	(800)	ND	(0.4)	ND	(0.4)	ND	(0.4)	ND	(0.4)	ND	(400)
1,3-Dichlorobenzene	130	(800)	ND	(0.4)	ND	(0.4)	ND	(0.4)	ND	(0.4)	ND	(400)
1,4-Dichlorobenzene	5	(600)	ND	(0.3)	ND	(0.3)	ND	(0.3)	ND	(0.3)	ND	(300)
Benzene	1	(400)	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(200)
Chlorobenzene	30	(400)	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(200)
Ethylbenzene	680	(400)	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(200)
Toluene	NE	(400)	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(200)
Total Xylenes	1750	(400)	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(200)

ALL UNITS ARE ug/L

= DHS Action Level  
 = Extraction well  
 = Result differs from last issue of report  
 = Not analysed  
 = Normal sample  
 = Radian Corporation, Sacramento  
 = Unconfirmed, second column not requested  
 = Result qualified due to one of the following analytical considerations.  
 = Coelution  
 = Interference  
 = Detected in blank, result not corrected  
 = Field Duplicate  
 = DHS maximum contaminant level  
 = Not detected at specified detection limit  
 = Previously confirmed  
 = Radian Analytical Services, Sacramento  
 = Result obtained from secondary column  
 = Result qualified due to one of the following analytical considerations.  
 = Interference  
 = Confirmed on second column  
 = Exceeds calibration range  
 = Monitoring well  
 = Threshold value not established  
 = US. EPA primary maximum contaminant level  
 = Random error

TABLE 1-24 (Continued)

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MW-128			
Shallow			
30-Jan-90			
RAD			
01-Feb-90			
RAS			
NS			
NS			
WELL NUMBER			
MW-128			
Shallow			
30-Jan-90			
RAD			
01-Feb-90			
RAS			
NS			
NS			
WELL NUMBER			
MW-128			
Shallow			
30-Jan-90			
RAD			
01-Feb-90			
RAS			
NS			
NS			
WELL NUMBER			
MW-128			
Shallow			
30-Jan-90			
RAD			
01-Feb-90			
RAS			
NS			
NS			
WELL NUMBER			
MW-128			
Shallow			
30-Jan-90			
RAD			
01-Feb-90			
RAS			
NS			
NS			
WELL NUMBER			
MW-128			
Shallow			
30-Jan-90			
RAD			
01-Feb-90			
RAS			
NS			
NS			
WELL NUMBER			
MW-128			
Shallow			
30-Jan-90			
RAD			
01-Feb-90			
RAS			
NS			
NS			
WELL NUMBER			
MW-128			
Shallow			
30-Jan-90			
RAD			
01-Feb-90			
RAS			
NS			
NS			
WELL NUMBER			
MW-128			
Shallow			
30-Jan-90			
RAD			
01-Feb-90			
RAS			
NS			
NS			
WELL NUMBER			
MW-128			
Shallow			
30-Jan-90			
RAD			
01-Feb-90			
RAS			
NS			
NS			
WELL NUMBER			
MW-128			
Shallow			
30-Jan-90			
RAD			
01-Feb-90			
RAS			
NS			
NS			
WELL NUMBER			
MW-128			
Shallow			
30-Jan-90			
RAD			
01-Feb-90			
RAS			
NS			
NS			
WELL NUMBER			
MW-128			
Shallow			
30-Jan-90			
RAD			
01-Feb-90			
RAS			
NS			
NS			
WELL NUMBER			
MW-128			
Shallow			
30-Jan-90			
RAD			
01-Feb-90			
RAS			
NS			
NS			
WELL NUMBER			
MW-128			
Shallow			
30-Jan-90			
RAD			
01-Feb-90			
RAS			
NS			
NS			
WELL NUMBER			
MW-128			
Shallow			
30-Jan-90			
RAD			
01-Feb-90			
RAS			
NS			
NS			
WELL NUMBER			
MW-128			
Shallow			
30-Jan-90			

TABLE 1-25 MASTER LOG OF WELLS SAMPLED FOR METHOD 6010 FOR AREA C AND ADJACENT ON-BASE AREAS,  
GROUNDWATER SAMPLING AND ANALYSIS PROGRAM,  
JANUARY TO MARCH 1990, McLELLAN AIR FORCE BASE

Ground Water Zone Date Sampled Sampled By Date Analyzed Lab Field Analysis Lab Analysis	EW-137			EW-140			EW-141			EW-144		
	Deep A	23-Jan-90	Deep A	23-Jan-90	Deep B	23-Jan-90	Deep A	23-Jan-90	Deep B	23-Jan-90	Deep A	23-Jan-90
	RAD		RAD		RAD		RAD		RAD		RAD	
	RAS		RAS		RAS		RAS		RAS		RAS	
	NS		NS		NS		NS		NS		NS	
	NS		NS		NS		NS		NS		NS	
Analytes	Maximum Contaminant Level Or Action Level			Detection Limit			Detection Limit			Detection Limit		
	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit
Aluminum	1 MCL	ND	(0.045)	(0.045)	ND	(0.045)	ND	(0.045)	ND	(0.045)	ND	(0.045)
Antimony	NE	ND	(0.034)	(0.034)	ND	(0.034)	ND	(0.034)	ND	(0.034)	ND	(0.034)
Arsenic	0.05 MCL	ND	(0.053)	(0.053)	ND	(0.053)	ND	(0.053)	ND	(0.053)	ND	(0.053)
Barium	1 MCL	0.15	(0.002)	(0.002)	0.11	(0.002)	0.10	(0.002)	0.10	(0.002)	0.099	(0.002)
Beryllium	NE	ND	(0.001)	(0.001)	ND	(0.001)	ND	(0.001)	ND	(0.001)	ND	(0.001)
Boron	NE	0.41 B	(0.006)	(0.006)	0.37 B	(0.006)	0.40 B	(0.006)	0.36 B	(0.006)	0.36 B	(0.006)
Cadmium	0.01 MCL	ND	(0.004)	(0.004)	ND	(0.004)	ND	(0.004)	ND	(0.004)	ND	(0.004)
Calcium	NE	37.	(0.01)	(0.01)	31.	(0.01)	26	(0.01)	24.	(0.01)	24.	(0.01)
Chromium	0.05 MCL	0.017	(0.007)	(0.007)	0.021	(0.007)	0.018	(0.007)	0.017	(0.007)	0.017	(0.007)
Cobalt	NE	ND	(0.007)	(0.007)	ND	(0.007)	ND	(0.007)	ND	(0.007)	ND	(0.007)
Copper	NE	0.021	(0.006)	(0.006)	0.014	(0.006)	0.014	(0.006)	0.013	(0.006)	0.013	(0.006)
Iron	NE	0.44	(0.007)	(0.007)	0.14	(0.007)	0.27	(0.007)	0.49	(0.007)	0.49	(0.007)
Lead	0.05 MCL	ND	(0.042)	(0.042)	ND	(0.042)	ND	(0.042)	ND	(0.042)	ND	(0.042)
Magnesium	NE	30.	(0.03)	(0.03)	25	(0.03)	21	(0.03)	19	(0.03)	19	(0.03)
Manganese	NE	ND	(0.002)	(0.002)	ND	(0.002)	0.0030	(0.002)	0.0020	(0.002)	0.0020	(0.002)
Molybdenum	NE	ND	(0.008)	(0.008)	0.013	(0.008)	ND	(0.008)	ND	(0.008)	ND	(0.008)
Nickel	NE	ND	(0.015)	(0.015)	ND	(0.015)	ND	(0.015)	ND	(0.015)	ND	(0.015)
Potassium	NE	ND	(3)	(3)	ND	(3)	ND	(3)	ND	(3)	ND	(3)
Selenium	0.01 MCL	ND	(0.075)	(0.075)	ND	(0.075)	ND	(0.075)	ND	(0.075)	ND	(0.075)
Silicon	NE	38.	(0.058)	(0.058)	39	(0.058)	38	(0.058)	38.	(0.058)	38.	(0.058)
Silver	0.05 MCL	ND	(0.007)	(0.007)	ND	(0.007)	ND	(0.007)	ND	(0.007)	ND	(0.007)
Sodium	NE	24	(0.029)	(0.029)	23.	(0.029)	20	(0.029)	19	(0.029)	19	(0.029)
Thallium	NE	ND	(0.051)	(0.051)	ND	(0.051)	ND	(0.051)	ND	(0.051)	ND	(0.051)
Vanadium	NE	0.026	(0.008)	(0.008)	0.024	(0.008)	0.026	(0.008)	0.028	(0.008)	0.028	(0.008)
Zinc	NE	0.0070 B	(0.002)	(0.002)	0.0040 B	(0.002)	0.0030 B	(0.002)	0.0020 B	(0.002)	0.0020 B	(0.002)

ALL UNITS ARE mg/L

AL = DHS Action Level  
EW = Extraction Well  
I = Result differs from last issue of report  
NA = Not analyzed  
NS = Normal sample  
RAD = Radian Corporation, Sacramento  
U = Unconfirmed, second column not requested

B = Detected in blank, result not corrected  
FD = Field Duplicate  
MCL = DHS maximum contaminant level  
ND = Not detected at specified detection limit  
P = Previously confirmed  
RAS = Radian Analytical Services, Sacramento

C = Confirmed on second column  
G = Exceeds calibration range  
MW = Monitoring well  
NE = Threshold value not established  
PMCL = US EPA primary maximum contaminant level  
S = Determined by method of standard addition

TABLE 1-25 (Continued)

		WELL NUMBER							
		MW-20D		MW-21D		MW-22D		MW-33S	
		Middle		Middle		Deep A		Shallow	
		23-Jan-90		31-Jan-90		26-Jan-90		29-Jan-90	
Ground Water Zone	Date Sampled	RAD		RAD		RAD		RAD	
	Sampled By								
	Date Analyzed	29-Jan-90		02-Feb-90		05-Feb-90		06-Feb-90	
Lab		RAS		RAS		RAS		RAS	
Field Analysis:		NS		NS		NS		NS	
Lab Analysis:		NS		NS		NS		NS	

TABLE 1-25 (Continued)

		WELL NUMBER							
		MW-44S		MW-60		MW-61		MW-62	
		Shallow		Shallow		Shallow		Shallow	
		30-Jan-90		30-Jan-90		23-Jan-90		23-Jan-90	
		RAD		RAD		RAD		RAD	
		02-Feb-90		02-Feb-90		29-Jan-90		29-Jan-90	
		RAS		RAS		RAS		RAS	
		NS		NS		NS		NS	
		NS		NS		NS		NS	
		NS		NS		NS		NS	
		NS		NS		NS		NS	
		NS		NS		NS		NS	
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		NS		NS		NS		NS	
		NS		NS		NS		NS	
		NS		NS		NS		NS	
		NS		NS		NS		NS	
		NS		NS		NS		NS	
		NS		NS		NS		NS	
		NS							

TABLE 1-25 (Continued)

		WELL NUMBER											
		MW-62				MW-75				MW-128			
		Shallow				Middle				Shallow			
Ground Water Zone		23-Jan-90				05-Feb-90				30-Jan-90			
Date Sampled		RAD				RAD				RAD			
Sampled By													
Date Analyzed		29-Jan-90				08-Feb-90				02-Feb-90			
Lab		RAS				RAS				RAS			
Field Analysis		FD				NS				FD			
Lab Analysis		NS				NS				NS			
		Maximum Contaminant Level Or Action Level											
Analytes		Result			Detection Limit			Result			Detection Limit		



TABLE 1-25 (Cont Innued )

		WELL NUMBER													
		MW-129				MW-130				MW-131				MW-133	
		Middle				Deep A				Shallow				Deep B	
		19-Jan-90				19-Jan-90				26-Jan-90				22-Jan-90	
Ground Water Zone		RAD				RAD				RAD				RAD	
Date Sampled		26-Jan-90				26-Jan-90				05-Feb-90				30-Jan-90	
Sampled By		RAS				RAS				RAS				RAS	
Date Analyzed		NS				NS				NS				NS	
Lab		NS				NS				NS				NS	
Field Analysis		NS				NS				NS				NS	
Lab Analysis		NS				NS				NS				NS	
		Maximum Contaminant				Detection				Detection				Detection	
		Level Or Action Level				Limit				Limit				Limit	
Analytes		Result				Result				Result				Result	
		Limit				Limit				Limit				Limit	
Aluminum	1	MCL	ND	(0.045)	ND	(0.045)	ND	(0.045)	ND	(0.045)	ND	(0.045)	ND	(0.045)	
Antimony	ME		ND	(0.034)	ND	(0.034)	ND	(0.034)	ND	(0.034)	ND	(0.034)	ND	(0.034)	
Arsenic	0.05	MCL	ND	(0.053)	ND	(0.053)	ND	(0.053)	ND	(0.053)	ND	(0.053)	ND	(0.053)	
Barium	1	MCL	0.055	(0.002)	0.10	(0.002)	0.056	(0.002)	0.056	(0.002)	0.055	(0.002)	0.055	(0.002)	
Beryllium	ME		ND	(0.001)	ND	(0.001)	ND	(0.001)	ND	(0.001)	ND	(0.001)	ND	(0.001)	
Boron	ME		0.28 B	(0.006)	0.29 B	(0.006)	0.25 B	(0.006)	0.25 B	(0.006)	0.32 B	(0.006)	0.32 B	(0.006)	
Cadmium	0.01	MCL	ND	(0.004)	ND	(0.004)	ND	(0.004)	ND	(0.004)	ND	(0.004)	ND	(0.004)	
Calcium	ME		16.	(0.01)	25.	(0.01)	20.	(0.01)	20.	(0.01)	23	(0.01)	23	(0.01)	
Chromium	0.05	MCL	0.017	(0.007)	0.014	(0.007)	0.016	(0.007)	0.016	(0.007)	0.010	(0.007)	0.010	(0.007)	
Cobalt	ME		ND	(0.007)	ND	(0.007)	ND	(0.007)	ND	(0.007)	ND	(0.007)	ND	(0.007)	
Copper	ME		0.0070	(0.006)	0.0080	(0.006)	0.019	(0.006)	0.019	(0.006)	0.018	(0.006)	0.018	(0.006)	
Iron	ME		ND	(0.007)	ND	(0.007)	ND	(0.007)	ND	(0.007)	0.015	(0.007)	0.015	(0.007)	
Lead	0.05	MCL	ND	(0.042)	ND	(0.042)	ND	(0.042)	ND	(0.042)	ND	(0.042)	ND	(0.042)	
Magnesium	ME		13.	(0.03)	20	(0.03)	14.	(0.03)	14.	(0.03)	14.	(0.03)	14.	(0.03)	
Manganese	ME		ND	(0.002)	0.0030	(0.002)	0.0030	(0.002)	0.0030	(0.002)	ND	(0.002)	ND	(0.002)	
Molybdenum	ME		ND	(0.008)	ND	(0.008)	ND	(0.008)	ND	(0.008)	ND	(0.008)	ND	(0.008)	
Nickel	ME		ND	(0.015)	0.017	(0.015)	0.10	(0.015)	0.10	(0.015)	ND	(0.015)	ND	(0.015)	
Potassium	ME		ND	(3)	ND	(3)	ND	(3)	ND	(3)	ND	(3)	ND	(3)	
Selenium	0.01	MCL	ND	(0.075)	ND	(0.075)	ND	(0.075)	ND	(0.075)	ND	(0.075)	ND	(0.075)	
Silicon	ME		37.	(0.058)	37.	(0.058)	36.	(0.058)	36.	(0.058)	39.	(0.058)	39.	(0.058)	
Silver	0.05	MCL	ND	(0.007)	ND	(0.007)	ND	(0.007)	ND	(0.007)	ND	(0.007)	ND	(0.007)	
Sodium	ME		16. B	(0.029)	19. B	(0.029)	19.	(0.029)	19.	(0.029)	21. B	(0.029)	21. B	(0.029)	
Thallium	ME		ND	(0.051)	ND	(0.051)	ND	(0.051)	ND	(0.051)	ND	(0.051)	ND	(0.051)	
Vanadium	ME		0.031	(0.008)	0.028	(0.008)	0.033	(0.008)	0.033	(0.008)	0.023	(0.008)	0.023	(0.008)	
Zinc	ME		0.0040	(0.002)	0.0050	(0.002)	0.0020	(0.002)	0.0020	(0.002)	0.010	(0.002)	0.010	(0.002)	

TABLE 1-25 (Continued)

		WELL NUMBER					
		MW-134		MW-135		MW-136	
Ground Water Zone		Deep A		Middle		Middle	
Date Sampled		15-Jan-90		22-Jan-90		22-Jan-90	
Sampled By		RAD		RAD		RAD	
Date Analyzed		19-Jan-90		30-Jan-90		30-Jan-90	
Lab		RAS		RAS		RAS	
Field Analysis		NS		NS		FD	
Lab Analysis		NS		NS		NS	
		MW-134		MW-135		MW-136	
		Deep A		Middle		Middle	
		15-Jan-90		22-Jan-90		22-Jan-90	
		RAD		RAD		RAD	
		19-Jan-90		30-Jan-90		30-Jan-90	
		RAS		RAS		RAS	
		NS		NS		FD	
		NS		NS		NS	
		MW-134		MW-135		MW-136	
		Deep A		Middle		Middle	
		15-Jan-90		22-Jan-90		22-Jan-90	
		RAD		RAD		RAD	
		19-Jan-90		30-Jan-90		30-Jan-90	
		RAS		RAS		RAS	
		NS		NS		FD	
		NS		NS		NS	
		MW-134		MW-135		MW-136	
		Deep A		Middle		Middle	
		15-Jan-90		22-Jan-90		22-Jan-90	
		RAD		RAD		RAD	
		19-Jan-90		30-Jan-90		30-Jan-90	
		RAS		RAS		RAS	
		NS		NS		FD	
		NS		NS		NS	
		MW-134		MW-135		MW-136	
		Deep A		Middle		Middle	
		15-Jan-90		22-Jan-90		22-Jan-90	
		RAD		RAD		RAD	
		19-Jan-90		30-Jan-90		30-Jan-90	
		RAS		RAS		RAS	
		NS		NS		FD	
		NS		NS		NS	
		MW-134		MW-135		MW-136	
		Deep A		Middle		Middle	
		15-Jan-90		22-Jan-90		22-Jan-90	
		RAD		RAD		RAD	
		19-Jan-90		30-Jan-90		30-Jan-90	
		RAS		RAS		RAS	
		NS		NS		FD	
		NS		NS		NS	
		MW-134		MW-135		MW-136	
		Deep A		Middle		Middle	
		15-Jan-90		22-Jan-90		22-Jan-90	
		RAD		RAD		RAD	
		19-Jan-90		30-Jan-90		30-Jan-90	
		RAS		RAS		RAS	
		NS		NS		FD	
		NS		NS		NS	
		MW-134		MW-135		MW-136	
		Deep A		Middle		Middle	
		15-Jan-90		22-Jan-90		22-Jan-90	
		RAD		RAD		RAD	
		19-Jan-90		30-Jan-90		30-Jan-90	
		RAS		RAS		RAS	
		NS		NS		FD	
		NS		NS		NS	
		MW-134		MW-135		MW-136	
		Deep A		Middle		Middle	
		15-Jan-90		22-Jan-90		22-Jan-90	
		RAD		RAD		RAD	
		19-Jan-90		30-Jan-90		30-Jan-90	
		RAS		RAS		RAS	
		NS		NS		FD	
		NS		NS		NS	
		MW-134		MW-135		MW-136	
		Deep A		Middle		Middle	
		15-Jan-90		22-Jan-90		22-Jan-90	
		RAD		RAD		RAD	
		19-Jan-90		30-Jan-90		30-Jan-90	
		RAS		RAS		RAS	
		NS		NS		FD	
		NS		NS		NS	
		MW-134		MW-135		MW-136	
		Deep A		Middle		Middle	
		15-Jan-90		22-Jan-90		22-Jan-90	
		RAD		RAD		RAD	
		19-Jan-90		30-Jan-90		30-Jan-90	
		RAS		RAS		RAS	
		NS		NS		FD	
		NS		NS		NS	
		MW-134		MW-135		MW-136	
		Deep A		Middle		Middle	
		15-Jan-90		22-Jan-90		22-Jan-90	
		RAD		RAD		RAD	
		19-Jan-90		30-Jan-90		30-Jan-90	
		RAS		RAS		RAS	
		NS		NS		FD	
		NS		NS		NS	
		MW-134		MW-135		MW-136	
		Deep A		Middle		Middle	
		15-Jan-90		22-Jan-90		22-Jan-90	
		RAD		RAD		RAD	
		19-Jan-90		30-Jan-90		30-Jan-90	
		RAS		RAS		RAS	
		NS		NS		FD	
		NS		NS		NS	
		MW-134		MW-135		MW-136	
		Deep A		Middle		Middle	
		15-Jan-90		22-Jan-90		22-Jan-90	
		RAD		RAD		RAD	
		19-Jan-90		30-Jan-90		30-Jan-90	
		RAS		RAS		RAS	
		NS		NS		FD	
		NS		NS		NS	
		MW-134		MW-135		MW-136	
		Deep A		Middle		Middle	
		15-Jan-90		22-Jan-90		22-Jan-90	
		RAD		RAD		RAD	
		19-Jan-90		30-Jan-90		30-Jan-90	
		RAS		RAS		RAS	
		NS		NS		FD	
		NS		NS		NS	
		MW-134		MW-135		MW-136	
		Deep A		Middle		Middle	
		15-Jan-90		22-Jan-90		22-Jan-90	
		RAD		RAD		RAD	
		19-Jan-90		30-Jan-90		30-Jan-90	
		RAS		RAS		RAS	
		NS		NS		FD	
		NS		NS		NS	
		MW-134		MW-135		MW-136	
		Deep A		Middle		Middle	
		15-Jan-90		22-Jan-90		22-Jan-90	
		RAD		RAD		RAD	
		19-Jan-90		30-Jan-90		30-Jan-90	
		RAS		RAS		RAS	
		NS		NS		FD	
		NS		NS		NS	
		MW-134		MW-135		MW-136	
		Deep A		Middle		Middle	
		15-Jan-90		22-Jan-90		22-Jan-90	
		RAD		RAD		RAD	
		19-Jan-90		30-Jan-90		30-Jan-90	
		RAS		RAS		RAS	
		NS		NS		FD	
		NS		NS		NS	
		MW-134		MW-135		MW-136	
		Deep A		Middle		Middle	
		15-Jan-90		22-Jan-90		22-Jan-90	
		RAD		RAD		RAD	
		19-Jan-90		30-Jan-90		30-Jan-90	
		RAS		RAS		RAS	
		NS		NS		FD	
		NS		NS		NS	
		MW-134		MW-135		MW-136	
		Deep A		Middle		Middle	
		15-Jan-90		22-Jan-90		22-Jan-90	
		RAD		RAD		RAD	
		19-Jan-90		30-Jan-90		30-Jan-90	
		RAS		RAS		RAS	
		NS		NS		FD	
		NS		NS		NS	
		MW-134		MW-135		MW-136	
		Deep A		Middle		Middle	
		15-Jan-90		22-Jan-90		22-Jan-90	
		RAD		RAD		RAD	
		19-Jan-90		30-Jan-90		30-Jan-90	
		RAS		RAS		RAS	
		NS		NS		FD	
		NS		NS		NS	
		MW-134		MW-135		MW-136	
		Deep A		Middle		Middle	
		15-Jan-90		22-Jan-90		22-Jan-90	
		RAD		RAD		RAD	
		19-Jan-90		30-Jan-90		30-Jan-90	
		RAS		RAS		RAS	
		NS		NS		FD	
		NS		NS		NS	
		MW-134		MW-135		MW-136	
		Deep A		Middle		Middle	
		15-Jan-90		22-Jan-90		22-Jan-90	
		RAD		RAD		RAD	
		19-Jan-90		30-Jan-90		30-Jan-90	
		RAS		RAS		RAS	
		NS		NS		FD	
		NS		NS		NS	
		MW-134		MW-135		MW-136	
		Deep A		Middle		Middle	
		15-Jan-90		22-Jan-90		22-Jan-90	
		RAD		RAD		RAD	
		19-Jan-90		30-Jan-90		30-Jan-90	
		RAS		RAS		RAS	
		NS		NS		FD	
		NS		NS		NS	
		MW-134		MW-135		MW-136	
		Deep A		Middle		Middle	
		15-Jan-90		22-Jan-90		22-Jan-90	
		RAD		RAD		RAD	
		19-Jan-90		30-Jan-90		30-Jan-90	
		RAS		RAS		RAS	
		NS		NS		FD	
		NS		NS		NS	
		MW-134		MW-135		MW-136	
		Deep A		Middle		Middle	
		15-Jan-90		22-Jan-90		22-Jan-90	
		RAD		RAD		RAD	
		19-Jan-90		30-Jan-90		30-Jan-90	
		RAS		RAS		RAS	
		NS		NS		FD	
		NS		NS		NS	
		MW-134		MW-135		MW-136	
		Deep A		Middle		Middle	
		15-Jan-90		22-Jan-90		22-Jan-90	
		RAD		RAD		RAD	
		19-Jan-90		30-Jan-90		30-Jan-90	
		RAS		RAS		RAS	
		NS		NS		FD	
		NS		NS		NS	
		MW-134		MW-135		MW-136	
		Deep A		Middle		Middle	
		15-Jan-90		22-Jan-90		22-Jan-90	
		RAD		RAD		RAD	
		19-Jan-90		30-Jan-90		30-Jan-90	
		RAS		RAS		RAS	
		NS		NS		FD	
		NS		NS		NS	
		MW-134		MW-135		MW-136	
		Deep A		Middle		Middle	
		15-Jan-90		22-Jan-90		22-Jan-90	
		RAD		RAD		RAD	
		19-Jan-90		30-Jan-90		30-Jan-90	
		RAS		RAS		RAS	
		NS		NS		FD	
		NS		NS		NS	
		MW-134		MW-135		MW-136	
		Deep A		Middle		Middle	
		15-Jan-90		22-Jan-90		22-Jan-90	
		RAD		RAD		RAD	
		19-Jan-90		30-Jan-90		30-Jan-90	
		RAS		RAS		RAS	
		NS		NS		FD	
		NS		NS		NS	
		MW-134		MW-135		MW-136	
		Deep A		Middle		Middle	
		15-Jan-90		22-Jan-90		22-Jan-90	
		RAD		RAD		RAD	
		19-Jan-90		30-Jan-90		30-Jan-90	
		RAS		RAS		RAS	
		NS		NS		FD	
		NS		NS		NS	
		MW-134		MW-135		MW-136	
		Deep A		Middle		Middle	
		15-Jan-90		22-Jan-90		22-Jan-90	
		RAD		RAD		RAD	
		19-Jan-90		30-Jan-90		30-Jan-90	
		RAS		RAS		RAS	
		NS		NS		FD	
		NS		NS		NS	
		MW-134		MW-135		MW-136	
		Deep A		Middle		Middle	
		15-Jan-90		22-Jan-90		22-Jan-90	
		RAD		RAD		RAD	
		19-Jan-90		30-Jan-90		30-Jan-90	
		RAS		RAS		RAS	
		NS		NS		FD	
		NS		NS		NS	
		MW-134		MW-135		MW-136	
		Deep A		Middle		Middle	
		15-Jan-90		22-Jan-90		22-Jan-90	
		RAD		RAD		RAD	
		19-Jan-90		30-Jan-90		30-Jan-90	
		RAS		RAS		RAS	
		NS		NS		FD	
		NS		NS		NS	
		MW-134		MW-135		MW-136	
		Deep A		Middle		Middle	
		15-Jan-90		22-Jan-90		22-Jan-90	
		RAD		RAD		RAD	
		19-Jan-90		30-Jan-90		30-Jan-90	
		RAS		RAS		RAS	
		NS		NS		FD	
		NS		NS		NS	
		MW-134		MW-135		MW-136	
		Deep A		Middle		Middle	
		15-Jan-90		22-Jan-90		22-Jan-90	
		RAD		RAD		RAD	

TABLE 1-25. (Continued)

		WELL NUMBER			
		MW-138	MW-139	MW-142	MW-143
Ground Water Zone		Deep B	Shallow	Deep A	Deep A
Date Sampled		29-Jan-90	26-Jan-90	29-Jan-90	16-Jan-90
Sampled By		RAD	RAD	RAD	RAD
Date Analyzed		02-Feb-90	02-Feb-90	02-Feb-90	19-Jan-90
Lab		RAS	RAS	RAS	RAS
Field Analysis		NS	NS	NS	NS
Lab Analysis		NS	NS	NS	NS
		WELL NUMBER			
		MW-138	MW-139	MW-142	MW-143
Analytes	Maximum Contaminant Level Or Action Level	Detection Limit	Result	Detection Limit	Result
Aluminum	1 MCL	(0.045)	ND	(0.045)	ND
Antimony	NE	(0.034)	ND	(0.034)	ND
Arsenic	0.05 MCL	(0.053)	ND	(0.053)	ND
Barium	1 MCL	(0.002)	0.14	(0.002)	0.074
Beryllium	NE	(0.001)	ND	(0.001)	ND
Boron	NE	(0.006)	0.30 B	(0.006)	0.24
Cadmium	0.01 MCL	(0.004)	ND	(0.004)	ND
Calcium	NE	(0.01)	54	(0.01)	18
Chromium	0.05 MCL	(0.007)	0.0090	(0.007)	0.032
Cobalt	NE	(0.007)	ND	(0.007)	ND
Copper	NE	(0.006)	0.022	(0.006)	0.022
Iron	NE	(0.007)	0.089	(0.007)	0.010
Lead	0.05 MCL	(0.042)	ND	(0.042)	ND
Magnesium	NE	(0.03)	41	(0.03)	14
Manganese	NE	(0.002)	0.063	(0.002)	ND
Molybdenum	NE	(0.008)	ND	(0.008)	ND
Nickel	NE	(0.015)	0.23	(0.015)	ND
Potassium	NE	(3)	ND	(3)	ND
Selenium	0.01 MCL	(0.075)	ND	(0.075)	ND
Silicon	NE	(0.058)	39	(0.058)	38
Silver	0.05 MCL	(0.007)	ND	(0.007)	ND
Sodium	NE	(0.029)	28	(0.029)	16
Thallium	NE	(0.051)	ND	(0.051)	ND
Vanadium	NE	(0.008)	0.021	(0.008)	0.033
Zinc	NE	(0.002)	0.0030	(0.002)	0.0040

ALL UNITS ARE mg/L

AL = DHS Action Level  
EW = Extraction well  
I = Result differs from last issue of report  
NA = Not analyzed  
NS = Normal sample  
RAD = Radian Corporation, Sacramento  
U = Unconfirmed, second column not requested

B = Detected in blank, result not corrected  
FD = Field Duplicate  
MCL = DHS maximum contaminant level  
ND = Not detected at specified detection limit  
P = Previously confirmed  
RAS = Radian Analytical Services, Sacramento

C = Confirmed on second column  
G = Exceeds calibration range  
MW = Monitoring well  
NE = Threshold value not established  
PMCL = US. EPA primary maximum contaminant level  
S = Determined by method of standard addition

TABLE 1-26. MASTER LOG OF WELLS SAMPLED FOR METHOD 7196 FOR AREA C AND ADJACENT ON-BASE AREAS,  
GROUNDWATER SAMPLING AND ANALYSIS PROGRAM,  
JANUARY TO MARCH 1990, MCCLELLAN AIR FORCE BASE

		MW-62		MW-62		WELL NUMBER	
Ground Water Zone		Shallow		Shallow			
Date Sampled		23-Jan-90		23-Jan-90			
Sampled By		RAD		RAD			
Date Analyzed		24-Jan-90		24-Jan-90			
Lab		RAS		RAS			
Field Analysis		NS		FD			
Lab Analysis		NS		NS			
		Maximum Contaminant		Detection		Detection	
		Level Or Action Level		Limit		Limit	
Analytes		Result		Result			
Chromium, Hexavalent	50 PHCL	ND		(0 02)		ND (0 02)	

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 I = Result differs from last issue of report  
 NA = Not analyzed  
 NS = Normal sample  
 RAD = Radian Corporation, Sacramento  
 U = Unconfirmed, second column not requested

B = Detected in blank, result not corrected  
 FD = Field Duplicate  
 MCL = DHS maximum contaminant level  
 ND = Not detected at specified detection limit  
 P = Previously confirmed  
 RAS = Radian Analytical Services, Sacramento

C = Confirmed on second column  
 G = Exceeds calibration range  
 MW = Monitoring well  
 NE = Threshold value not established  
 PHCL = US. EPA primary maximum contaminant level  
 S = Determined by method of standard addition

TABLE 1-27 MASTER LOG OF WELLS SAMPLED FOR METHOD 8010 FOR AREA D AND ADJACENT ON-BASE AREAS,  
GROUNDWATER SAMPLING AND ANALYSIS PROGRAM,  
JANUARY TO MARCH 1990, MCCLELLAN AIR FORCE BASE

	WELL NUMBER			
	EW-73	EW-83	EW-83	EW-83
Ground Water Zone	Middle	Middle	Middle	Middle
Date Sampled	02-Feb-90	02-Feb-90	02-Mar-90	02-Mar-90
Sampled By	RAD	RAD	RAD	RAD
Date Analyzed	14-Feb-90	05-Mar-90	08-Feb-90	05-Mar-90
Lab	RAS	RAS	RAS	RAS
Field Analysis	NS	NS	NS	NS
Lab Analysis	NS	NS	NS	NS

Analytes	Maximum Contaminant Level Or Action Level	Detection		Detection		Detection	
		Result	Limit	Result	Limit	Result	Limit
1,1,1,2-Tetrachloroethane	NE	ND	(500)	ND	(500)	ND	(250)
1,1,1-Trichloroethane	200	770. C	(20)	990. PI	(200)	ND	(10)
1,1,2,2-Tetrachloroethane	1	ND	(15)	ND	(150)	ND	(7.5)
1,1,2-Trichloroethane	32	140. C	(20)	ND	(200)	ND	(10)
1,1-Dichloroethane	NE	420. C	(50)	1000. PI	(500)	ND	(25)
1,1-Dichloroethane	6	6900. GC	(20)	8300. PI	(200)	560 C	(10)
1,2,3-Trichloropropane	NE	ND	(500)	ND	(5000)	ND	(250)
1,2-Dichlorobenzene	NE	ND	(50)	ND	(500)	ND	(25)
1,2-Dichloroethane	0.5	43. C	(10)	ND	(100)	RD	(5)
1,2-Dichloropropane	5	ND	(10)	ND	(100)	ND	(5)
1,3-Dichlorobenzene	130	ND	(32)	ND	(320)	ND	(16)
1,4-Dichlorobenzene	5	ND	(24)	ND	(240)	ND	(12)
1-Chlorohexane	NE	ND	(500)	ND	(5000)	ND	(250)
2-Chloroethylvinylether	NE	ND	(50)	ND	(500)	ND	(25)
Benzyl Chloride	NE	ND	(1000)	ND	(10000)	ND	(500)
Bromobenzene	NE	ND	(500)	ND	(5000)	ND	(250)
Bromodichloromethane	100	ND	(100)	ND	(100)	ND	(5)
Bromoform	100	ND	(50)	ND	(500)	ND	(25)
Bromoethane	NE	ND	(120)	ND	(1200)	ND	(59)
Carbon Tetrachloride	0.5	ND	(12)	ND	(120)	ND	(6)
Chlorobenzene	30	ND	(25)	ND	(250)	ND	(12)
Chloroethane	NE	ND	(52)	ND	(520)	ND	(26)
Chloroform	100	ND	(10)	ND	(100)	ND	(5)
Chloromethane	NE	ND	(30)	ND	(300)	ND	(15)
Dibromochloromethane	100	ND	(20)	ND	(200)	ND	(10)
Dibromoethane	NE	ND	(500)	ND	(5000)	ND	(250)

ALL UNITS ARE ug/L

AL = DHS Action Level  
EW = Extraction well  
I = Result differs from last issue of report  
NA = Not analyzed  
NS = Normal sample  
RAD = Radian Corporation, Sacramento  
U = Unconfirmed, second column not requested  
(a), (b), (c) = Result qualified due to one of the following analytical considerations:  
(a) = Coelution  
(b) = Interference  
(c) = Random error  
B = Detected in blank, result not corrected  
FD = Field Duplicate  
MCL = DHS maximum contaminant level  
ND = Not detected at specified detection limit  
P = Previously confirmed  
RAS = Radian Analytical Services, Sacramento  
C = Confirmed on second column  
G = Exceeds calibration range  
MW = Monitoring well  
NE = Threshold value not established  
PMCL = US EPA primary maximum contaminant level

TABLE 1-27 (Continued)

	EW-73			EW-83			EW-83		
	Middle			Middle			Middle		
Ground Water Zone	02-Feb-90			02-Feb-90			02-Feb-90		
Date Sampled	RAD			RAD			RAD		
Sampled By									
Date Analyzed	14-Feb-90			05-Mar-90			05-Mar-90		
Lab	RAS			RAS			RAS		
Field Analysis	NS			NS			NS		
Lab Analysis	NS			NS			NS		
Analytes	Maximum Contaminant Level Or Action Level			Detection Limit			Detection Limit		
	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result
Methylene Chloride	NE	140. C	ND	(40)	2000 PI	(400)	ND	(40)	50. CI
Tetrachloroethene	5 MCL	ND	ND	(10)	ND	(100)	28. C	(10)	ND
Total 1,2-Dichloroethene	16 AL	390. C	ND	(20)	910 PI	(200)	ND	(20)	ND
Total Chloroethene	NE	ND	ND	(2500)	ND	(25000)	ND	(2500)	ND
Trans-1,3-Dichloropropene	NE	ND	ND	(34)	ND	(340)	ND	(34)	ND
Trichloroethene	5 MCL	1200. C	ND	(20)	1200 PI	(200)	140 C	(20)	79 CI
Trichlorofluoromethane	150 AL	ND	ND	(20)	ND	(200)	ND	(20)	ND
Vinyl Chloride	0.5 MCL	930 C	ND	(20)	1700 PI	(200)	ND	(20)	ND
bis(2-Chloroisopropyl)Ether	NE	ND	ND	(1000)	ND	(10000)	ND	(1000)	ND
cis-1,3-Dichloropropene	NE	ND	ND	(20)	ND	(200)	ND	(20)	ND

ALL UNITS ARE ug/L

AL = DHS Action Level  
 EW = Extraction Well  
 I = Result differs from last issue of report  
 NA = Not analyzed  
 NS = Normal sample  
 RAD = Radian Corporation, Sacramento  
 U = Unconfirmed, second column not requested  
 (a),(b),(c) = Result qualified due to one of the following analytical considerations:  
 (a) = Coelution  
 (b) = Interference  
 (c) = Random error  
 B = Detected in blank, result not corrected  
 FD = Field Duplicate  
 MCL = DHS maximum contaminant level  
 ND = Not detected at specified detection limit  
 P = Previously confirmed  
 RAS = Radian Analytical Services, Sacramento  
 (2) = Result obtained from secondary column  
 C = Confirmed on second column  
 G = Exceeds calibration range  
 MW = Monitoring well  
 NE = Threshold value not established  
 PMCL = US. EPA primary maximum contaminant level

TABLE 1-27 (Continued)

WELL NUMBER										
EW-84			EW-85			EW-85				
Ground Water Zone			Middle			Middle			Middle	
Date Sampled	Sampled By		02-Feb-90	02-Mar-90	02-Feb-90	02-Feb-90	02-Mar-90	02-Mar-90		
Date Analyzed	Lab		RAD	RAD	RAD	RAD	RAD	RAD		
Field Analysis			08-Feb-90	05-Mar-90	08-Feb-90	08-Feb-90	05-Mar-90	05-Mar-90		
Lab Analysis			RAS	RAS	RAS	RAS	RAS	RAS		
			NS	NS	NS	NS	NS	NS		
			NS	NS	NS	NS	NS	NS		
Maximum Contaminant			Detection			Detection			Detection	
Analytes	Level Or	Action Level	Result	Limit	Result	Limit	Result	Limit	Result	Limit
1,1,1,2-Tetrachloroethane	NE		ND	(500)	ND	(500)	ND	(500)	ND	(250)
1,1,1,1-Trichloroethane	200	MCL	130. C	(20)	140	CI	170	C	200. CI	(10)
1,1,1,2,2-Tetrachloroethane	1	MCL	ND	(15)	ND	(15)	ND	(15)	ND	(7.5)
1,1,1,2-Trichloroethane	32	MCL	ND	(20)	ND	(20)	ND	(20)	ND	(10)
1,1,1-Dichloroethane	NE		ND	(50)	290	CI	ND	(50)	ND	(25)
1,1,1-Dichloroethane	6	MCL	950. C	(20)	1300. CI	(20)	450. C	(20)	720. CI	(10)
1,1,2,3-Trichloropropane	NE		ND	(500)	ND	(500)	ND	(500)	ND	(250)
1,1,2-Dichlorobenzene	NE		ND	(50)	ND	(50)	ND	(50)	ND	(25)
1,1,2-Dichloroethane	0.5	MCL	150. C	(10)	120. CI	(10)	ND	(10)	12. CI	(5)
1,1,2-Dichloropropane	5	PHCL	ND	(10)	ND	(10)	ND	(10)	ND	(5)
1,1,3-Dichlorobenzene	130	MCL	ND	(32)	ND	(32)	ND	(32)	ND	(16)
1,1,4-Dichlorobenzene	5	MCL	ND	(24)	ND	(24)	ND	(24)	ND	(12)
1-Chlorohexane	NE		ND	(500)	ND	(500)	ND	(500)	ND	(250)
2-Chloroethylvinylether	NE		ND	(50)	ND	(50)	ND	(50)	ND	(25)
Benzyl Chloride	NE		ND	(1000)	ND	(1000)	ND	(1000)	ND	(500)
Bromobenzene	NE		ND	(500)	ND	(500)	ND	(500)	ND	(250)
Bromodichloromethane	100	PHCL	ND	(10)	ND	(10)	ND	(10)	ND	(5)
Bromoform	100	PHCL	ND	(50)	ND	(50)	ND	(50)	ND	(25)
Carbon Tetrachloride	NE		ND	(120)	ND	(120)	ND	(120)	ND	(59)
Chlorobenzene	0.5	MCL	ND	(12)	ND	(12)	ND	(12)	ND	(6)
Chloroethane	30	AL	ND	(25)	ND	(25)	ND	(25)	ND	(12)
Chloroform	NE		ND	(52)	ND	(52)	ND	(52)	ND	(26)
Chloroform	100	PHCL	ND	(10)	ND	(10)	ND	(10)	ND	(5)
Chloromethane	NE		ND	(30)	ND	(30)	ND	(30)	ND	(15)
Dibromochloroethane	NE		ND	(20)	ND	(20)	ND	(20)	ND	(10)
Dibromomethane	NE		ND	(500)	ND	(500)	ND	(500)	ND	(250)
Ethylene Chloride	NE		ND	(40)	330	CI(a)	ND	(40)	51	CI (20)

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= DHS Action Level	B	= Detected in blank, result not corrected	C	= Confirmed on second column
= Extraction well	FD	= Field Duplicate	G	= Exceeds calibration range
= Result differs from last issue of report	MCL	= DHS maximum contaminant level	MW	= Monitoring well
= Not analyzed	MD	= Not detected at specified detection limit	NE	= Threshold value not established
= RIA	P	= Previous analysis confirmed	PMCL	= US EPA primary maximum contaminant level
= Normal sample	EAS	= Radon Analytical Services, Sacramento		
= Median Corporation, Sacramento	(2)	= Result obtained from secondary column		
= Unconfirmed, second column not requested	(b)	= Interference	(c)	= Random error
= U				
= Result qualified due to one of the following analytical considerations.				
= Coelution				



TABLE 1-2/ (Continued)

WELL NUMBER											
EW-86				EW-87				EW-10			
Ground Water Zone:				Middle				Shallow			
Date Sampled				02-Feb-90				21-Feb-90			
Sampled By				RAD				RAD			
Date Analyzed				08-Feb-90				05-Mar-90			
Lab				RAS				RAS			
Field Analysis				NS				NS			
Lab Analysis				NS				NS			
Maximum Contaminant Level Or Action Level				Detection Limit		Result		Detection Limit		Result	
Analytes				Limit		Limit		Limit		Limit	
1,1,1,2-Tetrachloroethane				NE	(50)	ND	(100)	ND	(50)	ND	(250)
1,1,1-Trichloroethane				200	(2)	ND	(4)	ND	(2)	30	(10)
1,1,1,2,2-Tetrachloroethane				1	(1.5)	ND	(3)	ND	(1.5)	ND	(7.5)
1,1,1,2-Trichloroethane				32	(2)	ND	(4)	ND	(2)	ND	(10)
1,1-Dichloroethane				NE	(5)	ND	(10)	ND	(5)	79. C	(25)
1,1,1-Dichloroethane				6	(2)	100. C	(4)	130	(2)	350. C	(10)
1,1,2,3-Trichloropropane				NE	(50)	ND	(100)	ND	(50)	ND	(250)
1,1,2-Dichlorobenzene				NE	(5)	ND	(10)	ND	(5)	63. C	(25)
1,1,1,2-Dichloroethane				0.5	(1)	ND	(2)	ND	(1)	250	(5)
1,1,2-Dichloropropane				5	(2)	ND	(1)	ND	(1)	ND	(5)
1,1,3-Dichlorobenzene				130	(3.2)	ND	(6.4)	ND	(3.2)	ND	(16)
1,1,4-Dichlorobenzene				5	(2.4)	ND	(4.8)	ND	(2.4)	ND	(12)
1-Chlorobenzene				HE	(50)	ND	(100)	ND	(50)	ND	(250)
2-Chloroethylvinylether				NE	(5)	ND	(10)	ND	(5)	ND	(25)
Benzyl Chloride				NE	(100)	ND	(200)	ND	(100)	ND	(500)
Bromobenzene				NE	(50)	ND	(100)	ND	(50)	ND	(250)
Bromodichloromethane				100	(1)	ND	(2)	ND	(1)	ND	(5)
Bromoform				100	(5)	ND	(10)	ND	(5)	ND	(25)
Bromomethane				NE	(12)	ND	(24)	ND	(12)	ND	(59)
Carbon Tetrachloride				0.5	(1.2)	ND	(2.4)	ND	(1.2)	ND	(6)
Chlorobenzene				30	(2.5)	ND	(5)	ND	(2.5)	ND	(13)
Chloroethane				NE	(5.2)	ND	(10)	ND	(5.2)	ND	(26)
Chloroform				100	(1)	ND	(2)	ND	(1)	ND	(5)
Chloromethane				NE	(3)	ND	(6)	ND	(3)	ND	(15)
Dibromochloromethane				100	(2)	ND	(4)	ND	(2)	ND	(10)
Dibromomethane				NE	(50)	ND	(100)	ND	(50)	ND	(250)
Methylene Chloride				NE	(4)	ND	(8)	14	(4)	ND	(20)

TABLE 1-27 (Continued)

Ground Water Zone Date Sampled Sampled By Date Analyzed Lab Field Analysis Lab Analysis	EW-86		EW-87		EW-87		MW-10	
	Middle	02-Feb-90	Middle	02-Feb-90	Middle	02-Mar-90	Shallow	21-Feb-90
	RAD		RAD		RAD		RAD	
	RAS		RAS		RAS		RAS	
	NS		NS		NS		NS	
	NS		NS		NS		NS	
Analytes	Maximum Contaminant Level Or Action Level		Detection Limit		Detection Limit		Detection Limit	
	Result	Limit	Result	Limit	Result	Limit	Result	Limit
Tetrachloroethene	5 MCL	23. (a)	ND	(2)	ND, I	(1)	ND	(5)
Total 1,2-Dichloroethane	16 AL	ND	ND	(4)	5.3 CI	(2)	83. C	(10)
Total Chlorotoluene	NE	ND	ND	(500)	ND	(250)	ND	(1300)
Trans-1,3-Dichloropropene	NE	ND	ND	(6.8)	ND	(3.4)	ND	(17)
Trichloroethene	5 MCL	33. C	78 C	(4)	63. CI	(2)	780 C	(10)
Trichlorofluoromethane	150 AL	ND	ND	(4)	ND	(2)	ND	(10)
Vinyl Chloride	0.5 MCL	ND	ND	(4)	ND	(2)	ND	(10)
bis(2-Chloroisopropyl) Ether	NE	ND	ND	(200)	ND	(100)	ND	(500)
cis-1,3-Dichloropropene	NE	ND	ND	(4)	ND	(2)	ND	(10)

ALL UNITS ARE ug/L

AL = DHS Action Level  
EW = Extraction well  
I = Result differs from last issue of report  
MA = Not analyzed  
NS = Normal sample  
RAD = Radian Corporation, Sacramento  
U = Unconfirmed, second column not requested  
(a), (b), (c) = Result qualified due to one of the following analytical considerations:  
(a) = Coelution  
(b) = Interference  
(c) = Random error  
B = Detected in blank, result not corrected  
FD = Field Duplicate  
MCL = DHS maximum contaminant level  
ND = Not detected at specified detection limit  
P = Previously confirmed  
RAS = Radian Analytical Services, Sacramento  
(2) = Result obtained from secondary column  
C = Confirmed on second column  
G = Exceeds calibration range  
MW = Monitoring well  
NE = Threshold value not established  
PHCL = US. EPA primary maximum contaminant level

ALL UNITS ARE ug/L

AL = DHS Action Level  
 EW = Extraction well  
 I = Result differs from last issue of report  
 NA = Not analysed  
 NS = Normal sample  
 RAD = Radian Corporation, Sacramento  
 RAS = Radian Analytical Services, Sacramento  
 U = Unconfirmed, second column not requested  
 (a), (b), (c) = Result qualified due to one of the following analytical considerations:  
 (a) = Coelution  
 (b) = Interference  
 (c) = Random error

TABLE 1-27 (Continued)

Ground Water Zone Date Sampled Sampled By Date Analyzed Lab Field Analysis Lab Analysis	MW-11			MW-11			MW-12			MW-14		
	Shallow	22-Feb-90	21-Feb-90	Shallow	22-Feb-90	21-Feb-90	Shallow	20-Feb-90	21-Feb-90	Shallow	21-Feb-90	21-Feb-90
	RAD			RAD			RAD			RAD		
	RAS	25-Feb-90		RAS	01-Mar-90		RAS	23-Feb-90		RAS	24-Feb-90	
	NS			FD			NS			NS		
	NS			NS			NS			NS		
Analytes	Maximum Contaminant Level Or Action Level			Detection Limit			Detection Limit			Detection Limit		
	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
Tetrachloroethene	5 MCL	ND	ND	(100)	ND	ND	(100)	140. C	ND	(25)	ND	(20)
Total 1,2-Dichloroethene	16 AL	ND	ND	(200)	ND	ND	(200)	ND	ND	(50)	ND	(40)
Total Chlorotoluene	NE	ND	ND	(25000)	ND	ND	(25000)	ND	ND	(6300)	ND	(5000)
Trans-1,3-Dichloropropene	NE	ND	ND	(340)	ND	ND	(340)	ND	ND	(85)	ND	(68)
Trichloroethene	5 MCL	3900. C	3900. C	(200)	3000. CI	3000. CI	(200)	1400 C	1900. C	(50)	1900. C	(40)
Trichlorofluoromethane	150 AL	ND	ND	(200)	ND	ND	(200)	ND	ND	(50)	ND	(40)
Vinyl Chloride	0.5 MCL	ND	ND	(200)	ND	ND	(200)	ND	ND	(50)	ND	(40)
bis(2-Chloroisopropyl)Ether	NE	ND	ND	(10000)	ND	ND	(10000)	ND	ND	(2500)	ND	(2000)
cis-1,3-Dichloropropene	NE	ND	ND	(200)	ND	ND	(200)	ND	ND	(50)	ND	(40)

ALL UNITS ARE ug/L

AL = DHS Action Level  
 EW = Extraction well  
 I = Result differs from last issue of report  
 NA = Not analyzed  
 NS = Normal sample  
 RAD = Radian Corporation, Sacramento  
 U = Unconfirmed, second column not requested  
 (a),(b),(c) = Result qualified due to one of the following analytical considerations:  
 (a) = Coelution  
 (b) = Interference  
 (c) = Random error

B = Detected in blank, result not corrected  
 FD = Field Duplicate  
 MCL = DHS maximum contaminant level  
 ND = Not detected at specified detection limit  
 P = Previously confirmed  
 RAS = Radian Analytical Services, Sacramento  
 (2) = Result obtained from secondary column

C = Confirmed on second column  
 G = Exceeds calibration range  
 MW = Monitoring well  
 NE = Threshold value not established  
 PMCL = US EPA primary maximum contaminant level

TABLE 1-27 (Continued)

		WELL NUMBER											
		MW-15				MW-19D				MW-51			
		Shallow				Middle				Deep A			
		15-Feb-90				28-Feb-90				12-Jan-90			
		RAD				RAD				RAD			
		21-Feb-90				01-Mar-90				15-Jan-90			
		RAS				RAS				RAS			
		NS				NS				NS			
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ALL UNITS ARE ug/L

AL	DHS Action Level	B	C
EW	Extraction well	- Detected in blank, result not corrected	- Confirmed on second column
I	- Result differs from last issue of report	- Field Duplicate	- Exceeds calibration range
NA	- Not analyzed	MCL	MW
NS	- Normal sample	- DHS maximum contaminant level	- Monitoring well
NRAD	- Radon Corporation, Sacramento	ND	NE
U	- Unconfirmed, second column not requested	P	PHCL
(a)	- Result qualified due to one of the following analytical considerations.	- Previously confirmed	- Threshold value not established
(b)	- Interference	RAS	- US. EPA primary maximum contaminant level
(c)	- Cosolution	- Radian Analytical Services, Sacramento	
		(2) - Result obtained from secondary column	
			(c) - Random error

ALL UNITS ARE US/L

AL	= DHS Action Level	B	= Detected in blank, result not corrected	C	= Confirmed on second column
EW	= Extraction well	FD	= Field Duplicate	G	= Exceeds calibration range
I	= Result differs from last issue of report	MCL	= DHS maximum contaminant level	MW	= Monitoring well
NA	= Not analyzed	ND	= Not detected at specified detection limit	NE	= Threshold value not established
NS	= Normal sample	P	= Previously confirmed	PNCL	= US EPA primary maximum contaminant level
RAD	= Radon Corporation, Sacramento	RAS	= Radon Analytical Services, Sacramento		
U	= Unconfirmed, second column not requested	(2)	= Result obtained from secondary column		
(a),(b),(c)	= Result qualified due to one of the following analytical considerations.				
(a)	= Coelution	(b)	= Interference	(c)	= Random error

TABLE 1-2/ (Continued )

Ground Water Zone Date Sampled Sampled By Date Analyzed Lab Field Analysis Lab Analysis	MW-53			MW-54			MW-55			MW-57		
	Maximum Contaminant Level Or Action Level	Result	Detection Limit	Maximum Contaminant Level Or Action Level	Result	Detection Limit	Maximum Contaminant Level Or Action Level	Result	Detection Limit	Maximum Contaminant Level Or Action Level	Result	Detection Limit
Tetrachloroethane	5 MCL	ND	(0.1)	ND	(0.1)	(0.1)	ND	(0.1)	(0.1)	1.1 C	(0.1)	(0.1)
Total 1,2-Dichloroethane	16 AL	ND	(0.2)	ND	(0.2)	(0.2)	ND	(0.2)	(0.2)	ND	(0.2)	(0.2)
Total Chlorotoluene	NE	ND	(25)	ND	(25)	(25)	ND	(25)	(25)	ND	(25)	(25)
Trans-1,3-Dichloropropene	NE	ND	(0.34)	ND	(0.34)	(0.34)	ND	(0.34)	(0.34)	ND	(0.34)	(0.34)
Trichloroethane	5 MCL	ND	(0.2)	ND	(0.2)	(0.2)	ND	(0.2)	(0.2)	1.8 C	(0.2)	(0.2)
Trichlorofluoromethane	150 AL	ND	(0.2)	ND	(0.2)	(0.2)	ND	(0.2)	(0.2)	ND	(0.2)	(0.2)
Vinyl Chloride	0.5 MCL	ND	(0.2)	ND	(0.2)	(0.2)	ND	(0.2)	(0.2)	ND	(0.2)	(0.2)
bis(2-Chloroisopropyl)Ether	NE	ND	(10)	ND	(10)	(10)	ND	(10)	(10)	ND	(10)	(10)
cis-1,3-Dichloropropene	NE	ND	(0.2)	ND	(0.2)	(0.2)	ND	(0.2)	(0.2)	ND	(0.2)	(0.2)

ALL UNITS ARE ug/L

AL = DHS Action Level  
EW = Extraction well  
I = Result differs from last issue of report  
NA = Not analyzed  
NS = Normal sample  
RAD = Radian Corporation, Sacramento  
U = Unconfirmed, second column not requested  
(a),(b),(c) = Result qualified due to one of the following analytical considerations:  
(a) = Coelution  
(b) = Interference  
(c) = Random error

B = Detected in blank, result not corrected  
FD = Field Duplicate  
MCL = DHS maximum contaminant level  
ND = Not detected at specified detection limit  
P = Previously confirmed  
RAS = Radian Analytical Services, Sacramento  
(2) = Result obtained from secondary column

C = Confirmed on second column  
G = Exceeds calibration range  
MW = Monitoring well  
NE = Threshold value not established  
PHCL = US. EPA primary maximum contaminant level



TABLE 1-27 (Cont Inued.)

Analytes	Maximum Contaminant Level Or Action Level	MW-58			MW-59			MW-70			MW-72		
		Deep A			Deep A			Middle			Middle		
		Result	Detection Limit	Result	Result	Detection Limit	Result	Result	Detection Limit	Result	Result	Detection Limit	Result
Ground Water Ions													
Date Sampled		22-Jan-90		24-Jan-90				25-Jan-90			20-Feb-90		
Sampled By		RAD		RAD				RAD			RAD		
Date Analyzed		23-Jan-90		25-Jan-90				28-Jan-90			24-Feb-90		
Lab		RAS		RAS				RAS			RAS		
Field Analysis		NS		NS				NS			NS		
Lab Analysis		NS		NS				NS			NS		
<hr/>													
Analytes	Maximum Contaminant Level Or Action Level	MW-58			MW-59			MW-70			MW-72		
		Result	Detection Limit	Result	Result	Detection Limit	Result	Result	Detection Limit	Result	Result	Detection Limit	Result
1,1,1,2-Tetrachloroethane	NE	ND	(5)	ND	0.30	(5)	ND	ND	(5)	ND	15.	(250)	ND
1,1,1-Trichloroethane	200	ND	(0.2)	ND	ND	(0.2)	ND	ND	(0.2)	ND	C	(10)	ND
1,1,2,2-Tetrachloroethane	1	ND	(0.15)	ND	ND	(0.15)	ND	ND	(0.15)	ND		(7.5)	ND
1,1,2-Trichloroethane	32	ND	(0.2)	ND	ND	(0.2)	ND	ND	(0.2)	ND		(10)	ND
1,1-Dichloroethane	NE	ND	(0.5)	ND	ND	(0.5)	ND	ND	(0.5)	ND		(25)	ND
1,1-Dichlorobenzene	6	ND	(0.2)	ND	ND	(0.2)	ND	ND	(0.2)	ND	260.	(10)	ND
1,2,3-Trichloropropane	NE	ND	(5)	ND	ND	(5)	ND	ND	(5)	ND		(250)	ND
1,2-Dichlorobenzene	NE	ND	(0.5)	ND	ND	(0.5)	ND	ND	(0.5)	ND		(25)	ND
1,2-Dichloroethane	0.5	ND	(0.1)	ND	ND	(0.1)	ND	ND	(0.1)	ND	140.	(5)	ND
1,2-Dichloropropane	5	ND	(0.1)	ND	ND	(0.1)	ND	ND	(0.1)	ND		(5)	ND
1,3-Dichlorobenzene	130	ND	(0.32)	ND	ND	(0.32)	ND	ND	(0.32)	ND		(16)	ND
1,4-Dichlorobenzene	5	ND	(0.24)	ND	ND	(0.24)	ND	ND	(0.24)	ND		(12)	ND
1-Chlorobenzene	NE	ND	(5)	ND	ND	(5)	ND	ND	(5)	ND		(250)	ND
2-Chloroethylvinylether	NE	ND	(0.5)	ND	ND	(0.5)	ND	ND	(0.5)	ND		(25)	ND
Benzyl Chloride	NE	ND	(10)	ND	ND	(10)	ND	ND	(10)	ND		(500)	ND
Bromobenzene	NE	ND	(5)	ND	ND	(5)	ND	ND	(5)	ND		(250)	ND
Bromodichloromethane	100	ND	(0.1)	ND	ND	(0.1)	ND	ND	(0.1)	ND		(5)	ND
Bromoform	100	ND	(0.5)	ND	ND	(0.5)	ND	ND	(0.5)	ND		(25)	ND
Bromomethane	NE	ND	(1.2)	ND	ND	(1.2)	ND	ND	(1.2)	ND		(59)	ND
Carbon Tetrachloride	0.5	ND	(0.12)	ND	ND	(0.12)	ND	ND	(0.12)	ND		(6)	ND
Chlorobenzene	30	ND	(0.25)	ND	ND	(0.25)	ND	ND	(0.25)	ND		(13)	ND
Chloroethane	NE	ND	(0.52)	ND	ND	(0.52)	ND	ND	(0.52)	ND		(26)	ND
Chloroform	100	ND	(0.1)	ND	ND	(0.1)	ND	ND	(0.1)	ND		(5)	ND
Chloromethane	NE	ND	(0.3)	ND	ND	(0.3)	ND	ND	(0.3)	ND		(15)	ND
Dibromochloromethane	100	ND	(0.2)	ND	ND	(0.2)	ND	ND	(0.2)	ND		(10)	ND
Dibromomethane	NE	ND	(5)	ND	ND	(5)	ND	ND	(5)	ND		(250)	ND
Methylene Chloride	NE	ND	(0.4)	ND	ND	(0.4)	ND	ND	(0.4)	ND		(20)	ND

ALL UNITS ARE ug/L

AL = DHS Action Level  
 EW = Extraction well  
 I = Result differs from last issue of report  
 NA = Not analyzed  
 NS = Normal sample  
 RAD = Radian Corporation, Sacramento  
 U = Unconfirmed, second column not requested  
 (a), (b), (c) = Result qualified due to one of the following analytical considerations:  
 (a) = Coelution  
 (b) = Interference  
 (c) = Random error  
 B = Detected in blank, result not corrected  
 FD = Field Duplicate  
 MCL = DHS maximum contaminant level  
 ND = Not detected at specified detection limit  
 P = Previously confirmed  
 RAS = Radian Analytical Services, Sacramento  
 (2) = Result obtained from secondary column  
 C = Confirmed on second column  
 G = Exceeds calibration range  
 MW = Monitoring well  
 NE = Threshold value not established  
 PMCL = US EPA primary maximum contaminant level

TABLE 1-27 (Continued)

	WELL NUMBER									
	MW-58			MW-59			MW-72			
	Ground Water Zone	Deep A	Deep A	Middle	Middle	Middle				
Date Sampled	22-Jan-90	24-Jan-90	25-Jan-90	25-Jan-90	20-Feb-90					
Sampled By	RAD	RAD	RAD	RAD	RAD					
Date Analyzed	23-Jan-90	23-Jan-90	25-Jan-90	28-Jan-90	24-Feb-90					
Lab	RAS	RAS	RAS	RAS	RAS					
Field Analysis	NS	NS	NS	NS	NS					
Lab Analysis	NS	NS	NS	NS	NS					
Analytes	Maximum Contaminant Level Or Action Level	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	
	5 MCL	ND	(0.1)	2 3 C	(0.1)	0 25 (a)	(0.1)	ND	(5)	
	Tetrachloroethane			ND	(0.2)	ND	(0.2)	15. C	(10)	
	Total 1,2-Dichloroethane	16 AL	(0.2)	ND	(25)	ND	(25)	ND	(1300)	
	Total Chlorotoluene	NE	(25)	ND	(0.34)	ND	(0.34)	ND	(17)	
	Trans-1,3-Dichloropropene	NE	(0.34)	ND	(0.2)	ND	(0.2)	700. C	(10)	
	Trichloroethane	5 MCL	(0.2)	ND	(0.2)	ND	(0.2)	ND	(10)	
	Trichlorofluoroethane	150 AL	(0.2)	ND	(0.2)	ND	(0.2)	ND	(10)	
	Vinyl Chloride	0.5 MCL	(0.2)	ND	(10)	ND	(10)	ND	(500)	
	bis(2-Chloroisopropyl)Ether	NE	(0.2)	ND	(0.2)	ND	(0.2)	ND	(10)	
	is-1,3-Dichloropropene	NE								

ALL UNITS ARE US/L

AL	= DHS Action Level	B	= Detected in blank, result not corrected	C	= Confirmed on second column
EW	= Extraction well	FD	= Field Duplicate	G	= Exceeds calibration range
I	= Result differs from last issue of report	MCL	= DHS maximum contaminant level	MW	= Monitoring well
NA	= Not analysed	ND	= Not detected at specified detection limit	NE	= Threshold value not established
NS	= Normal sample	P	= Previously confirmed	PHCL	= US EPA primary maximum contaminant level
RAD	= Radion Corporation, Sacramento	RAS	= Radian Analytical Services, Sacramento		
U	= Unconfirmed, second column not requested	(2)	= Result obtained from secondary column		
(a), (b), (c)	= Result qualified due to one of the following analytical considerations:				
(a)	= Coelution	(b)	= Interference	(c)	= Random error

TABLE 1-27 (Continued)

Ground Water Zone Date Sampled Sampled By Date Analyzed Lat Field Analysis Lab Analysis	MW-88			MW-89			MW-90			MW-91		
	Shallow	25-Jan-90	Shallow	29-Jan-90	Shallow	20-Feb-90	Shallow	17-Jan-90	Shallow	17-Jan-90	18-Jan-90	Shallow
	RAD		RAD		RAD		RAD		RAD		RAS	
	RAS	28-Jan-90	RAS	05-Feb-90	RAS	22-Feb-90	RAS		RAS		NS	
	NS		NS		NS		NS		NS		NS	
	NS		NS		NS		NS		NS		NS	
Analytes	Maximum Contaminant Level Or Action Level			Detection Limit			Detection Limit			Detection Limit		
	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit
1,1,1,2-Tetrachloroethane	NE	(5)	ND	(25)	ND	(5)	ND	(5)	ND	(5)	ND	(5)
1,1,1-Trichloroethane	200	(0.2)	ND	(1)	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)
1,1,2,2-Tetrachloroethane	1	(0.15)	ND	(0.75)	ND	(0.15)	ND	(0.15)	ND	(0.15)	ND	(0.15)
1,1,2-Trichloroethane	32	(0.2)	ND	(1)	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)
1,1-Dichloroethane	NE	(0.5)	ND	(2.5)	ND	(0.5)	ND	(0.5)	ND	(0.5)	ND	(0.5)
1,1-Dichloroethene	6	(0.2)	ND	(1)	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)
1,2,3-Trichloropropane	NE	(5)	ND	(25)	ND	(5)	ND	(5)	ND	(5)	ND	(5)
1,2-Dichlorobenzene	NE	(0.5)	ND	(2.5)	ND	(0.5)	ND	(0.5)	ND	(0.5)	ND	(0.5)
1,2-Dichloroethane	0.5	(0.1)	ND	(0.5)	ND	(0.1)	ND	(0.1)	ND	(0.1)	ND	(0.1)
1,2-Dichloropropane	5	(0.1)	ND	(0.5)	ND	(0.1)	ND	(0.1)	ND	(0.1)	ND	(0.1)
1,3-Dichlorobenzene	130	(0.32)	ND	(1.6)	ND	(0.32)	ND	(0.32)	ND	(0.32)	ND	(0.32)
1,4-Dichlorobenzene	5	(0.24)	ND	(1.2)	ND	(0.24)	ND	(0.24)	ND	(0.24)	ND	(0.24)
1-Chlorohexane	NE	(5)	ND	(25)	ND	(5)	ND	(5)	ND	(5)	ND	(5)
2-Chloroethylvinylether	NE	(0.5)	ND	(2.5)	ND	(0.5)	ND	(0.5)	ND	(0.5)	ND	(0.5)
Benzyl Chloride	NE	(10)	ND	(50)	ND	(10)	ND	(10)	ND	(10)	ND	(10)
Bromobenzene	NE	(5)	ND	(25)	ND	(5)	ND	(5)	ND	(5)	ND	(5)
Bromodichloromethane	100	(0.1)	ND	(0.5)	ND	(0.1)	ND	(0.1)	ND	(0.1)	ND	(0.1)
Bromoform	100	(0.5)	ND	(2.5)	ND	(0.5)	ND	(0.5)	ND	(0.5)	ND	(0.5)
Bromomethane	NE	(1.2)	ND	(5.9)	ND	(1.2)	ND	(1.2)	ND	(1.2)	ND	(1.2)
Carbon Tetrachloride	0.5	(0.12)	ND	(0.6)	ND	(0.12)	ND	(0.12)	ND	(0.12)	ND	(0.12)
Chlorobenzene	30	(0.25)	ND	(1.3)	ND	(0.25)	ND	(0.25)	ND	(0.25)	ND	(0.25)
Chloroethane	NE	(0.52)	ND	(2.6)	ND	(0.52)	ND	(0.52)	ND	(0.52)	ND	(0.52)
Chloroform	100	(0.1)	ND	(0.5)	ND	(0.1)	ND	(0.1)	ND	(0.1)	ND	(0.1)
Chloromethane	NE	(0.3)	ND	(1.5)	ND	(0.3)	ND	(0.3)	ND	(0.3)	ND	(0.3)
Dibromochloromethane	100	(0.2)	ND	(1)	ND	(0.2)	ND	(0.2)	ND	(0.2)	ND	(0.2)
Dibromomethane	NE	(5)	ND	(25)	ND	(5)	ND	(5)	ND	(5)	ND	(5)
Methylene Chloride	NE	(0.4)	ND	(2)	ND	(0.4)	ND	(0.4)	ND	(0.4)	ND	(0.4)

ALL UNITS ARE ug/L

AL = DHS Action Level  
EW = Extraction well  
I = Result differs from last issue of report  
NA = Not analyzed  
NS = Normal sample  
RAD = Radian Corporation, Sacramento  
U = Unconfirmed, second column not requested  
(a), (b), (c) = Result qualified due to one of the following analytical considerations  
(a) = Coelution  
(b) = Interference  
(c) = Random error

B = Detected in blank, result not corrected  
FD = Field Duplicate  
MCL = DHS maximum contaminant level  
ND = Not detected at specified detection limit  
P = Previously confirmed  
RAS = Radian Analytical Services, Sacramento  
(2) = Result obtained from secondary column

C = Confirmed on second column  
G = Exceeds calibration range  
MW = Monitoring well  
NE = Threshold value not established  
PMCL = US EPA primary maximum contaminant level

TABLE 1-27 (Continued)

Ground Water Zone Date Sampled Sampled By Date Analyzed Lab Field Analysis Lab Analysis	MW-88			MW-89			MW-90			MW-91		
	Shallow			Shallow			Shallow			Shallow		
	25-Jan-90	29-Jan-90	05-Feb-90	17-Jan-90	20-Feb-90	22-Feb-90	18-Jan-90	20-Feb-90	22-Feb-90	17-Jan-90	20-Feb-90	22-Feb-90
Maximum Contaminant Level Or Action Level	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
Detection Limit	Detection Limit	Detection Limit	Detection Limit	Detection Limit	Detection Limit	Detection Limit	Detection Limit	Detection Limit	Detection Limit	Detection Limit	Detection Limit	Detection Limit
Analytes	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
Tetrachloroethane	5 MCL	0.43 (a)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total 1,2-Dichloroethane	16 AL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Chlorotoluene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trans-1,3-Dichloropropene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethane	5 MCL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoroethane	150 AL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Chloride	0.5 MCL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroisopropyl) Ether	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

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AL = DHS Action Level  
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 NA = Not analyzed  
 NS = Normal sample  
 RAD = Radian Corporation, Sacramento  
 U = Unconfirmed, second column not requested  
 (a), (b), (c) = Result qualified due to one of the following analytical considerations:  
 (a) = Coalition  
 (b) = Interference  
 (c) = Random error  
 B = Detected in blank, result not corrected  
 FD = Field Duplicate  
 MCL = DHS maximum contaminant level  
 ND = Not detected at specified detection limit  
 P = Previously confirmed  
 RAS = Radian Analytical Services, Sacramento  
 (2) = Result obtained from secondary column  
 C = Confirmed on second column  
 G = Exceeds calibration range  
 MW = Monitoring well  
 NE = Threshold value not established  
 PHCL = US. EPA primary maximum contaminant level

TABLE 1-27 (Continued)

		WELL NUMBER					
		MW-92		MW-104		MW-105	
Ground Water Zone		Shallow		Shallow		Deep A	
Date Sampled		17-Jan-90		17-Jan-90		30-Jan-90	
Sampled By		RAD		RAD		RAD	
Date Analyzed		18-Jan-90		18-Jan-90		01-Feb-90	
Lab		RAS		RAS		RAS	
Field Analysis		NS		FD		NS	
Lab Analysis		NS		NS		NS	
		MW-92		MW-104		MW-105	
		Shallow		Shallow		Deep A	
		17-Jan-90		17-Jan-90		30-Jan-90	
		RAD		RAD		RAD	
		18-Jan-90		18-Jan-90		01-Feb-90	
		RAS		RAS		RAS	
		NS		FD		NS	
		NS		NS		NS	
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AL = DHS Action Level  
 EN = Extraction well  
 I = Result differs from last issue of report  
 NA = Not analysed  
 NS = Normal sample  
 RAD = Radian Corporation, Sacramento  
 U = Unconfirmed, second column not requested  
 (a), (b), (c) = Result qualified due to one of the following analytical considerations:  
 (a) = Conclusion  
 (b) = Interference  
 (c) = Random error

TABLE 1-28 MASTER LOG OF WELLS SAMPLED FOR METHOD 8020 FOR AREA D AND ADJACENT ON-BASE AREAS,  
GROUNDWATER SAMPLING AND ANALYSIS PROGRAM,  
JANUARY TO MARCH 1990, MCLELLAN AIR FORCE BASE

Ground Water Zone Date Sampled Sampled By Date Analyzed Lab Field Analysis Lab Analysis	EW-73		EW-73		EW-73	
	Middle 02-Feb-90 RAD 13-Feb-90 RAS MS MS	Middle 02-Mar-90 RAD 05-Mar-90 RAS NS NS	Middle 02-Feb-90 RAD 13-Feb-90 RAS MS MS	Middle 02-Mar-90 RAD 05-Mar-90 RAS NS NS	Middle 02-Mar-90 RAD 05-Mar-90 RAS NS NS	Middle 02-Mar-90 RAD 05-Mar-90 RAS NS NS
Maximum Contaminant Level Or Action Level						
Analytes	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit
1,2-Dichlorobenzene	NE	(40)	ND	(40)	ND	(400)
1,3-Dichlorobenzene	130 MCL	(40)	ND	(40)	ND	(400)
1,4-Dichlorobenzene	5 MCL	(30)	ND	(30)	ND	(300)
Benzene	1 MCL	(20)	ND	(20)	ND	(200)
Chlorobenzene	30 AL	(20)	ND	(20)	ND	(200)
Ethylbenzene	680 MCL	(20)	ND	(20)	ND	(200)
Toluene	NE	(20)	130. C	(20)	300. C	(200)
Total Xylenes	1750 MCL	(20)	ND	(20)	ND	(200)

ALL UNITS ARE ug/L

AL = DHS Action Level  
EW = Extraction well  
I = Result differs from last issue of report  
NA = Not analyzed  
MS = Normal sample  
RAD = Radian Corporation, Sacramento  
U = Unconfirmed, second column not requested  
(a),(b),(c) = Result qualified due to one of the following analytical considerations:  
(a) = Coelution  
(b) = Interference  
(c) = Random error

B = Detected in blank, result not corrected  
FD = Field Duplicate  
MCL = DHS maximum contaminant level  
ND = Not detected at specified detection limit  
P = Previously confirmed  
RAS = Radian Analytical Services, Sacramento  
(2) = Result obtained from secondary column

C = Confirmed on second column  
G = Exceeds calibration range  
MW = Monitoring well  
NE = Threshold value not established  
PHCL = US. EPA primary maximum contaminant level

TABLE 1-29 MASTER LOG OF WELLS SAMPLED FOR METHOD 8240 FOR AREA D AND ADJACENT ON-BASE AREAS,  
GROUNDWATER SAMPLING AND ANALYSIS PROGRAM,  
JANUARY TO MARCH 1990, MCCLELLAN AIR FORCE BASE

Ground Water Zone Date Sampled Sampled By Date Analyzed Lab Field Analysis Lab Analysis	EW-73			EW-73			EW-83			EW-84		
	Middle 23-Jan-90 RAD 28-Jan-90 RAS NS NS	Middle 23-Jan-90 RAD 29-Jan-90 RAS FD NS	Middle 23-Jan-90 RAD 29-Jan-90 RAS NS NS	Middle 23-Jan-90 RAD 29-Jan-90 RAS NS NS	Middle 23-Jan-90 RAD 29-Jan-90 RAS NS NS	Middle 23-Jan-90 RAD 29-Jan-90 RAS NS NS	Middle 23-Jan-90 RAD 29-Jan-90 RAS NS NS	Middle 23-Jan-90 RAD 29-Jan-90 RAS NS NS	Middle 23-Jan-90 RAD 29-Jan-90 RAS NS NS	Middle 23-Jan-90 RAD 29-Jan-90 RAS NS NS	Middle 23-Jan-90 RAD 29-Jan-90 RAS NS NS	Middle 23-Jan-90 RAD 29-Jan-90 RAS NS NS
Analytes	Maximum Contaminant Level Or Action Level	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result
1,1,1-Trichloroethane	200 MCL	550.	(190)	630	(150)	31	(15)	83.	(27)	ND	(35)	ND
1,1,2,2-Tetrachloroethane	1 MCL	ND	(250)	ND	(200)	ND	(20)	ND	(35)	ND	(35)	ND
1,1,2-Trichloroethane	32 MCL	ND	(250)	ND	(200)	ND	(20)	ND	(35)	ND	(35)	ND
1,1-Dichloroethane	NE	390.	(240)	440.	(190)	ND	(19)	280	(33)	ND	(33)	ND
1,1-Dichloroethane	6 MCL	6600.	(140)	7600.	(110)	610	(11)	1100	(20)	ND	(20)	ND
1,2-Dichloroethane	0.5 MCL	ND	(140)	ND	(110)	ND	(11)	130.	(20)	ND	(20)	ND
1,2-Dichloropropane	5 MCL	ND	(250)	ND	(200)	ND	(20)	ND	(35)	ND	(35)	ND
2-Butanone	NE	ND	(500)	560.	(400)	ND	(40)	ND	(70)	ND	(70)	ND
2-Chloroethylvinylether	NE	ND	(500)	ND	(400)	ND	(40)	ND	(70)	ND	(70)	ND
2-Hexanone	NE	ND	(500)	ND	(400)	ND	(40)	ND	(70)	ND	(70)	ND
4-Methyl-2-Pentanone	NE	1100.	(500)	1200	(400)	ND	(40)	ND	(70)	ND	(70)	ND
Acetone	NE	1500.	(500)	1600	(400)	ND	(40)	ND	(70)	ND	(70)	ND
Benzene	1 MCL	ND	(220)	ND	(180)	ND	(18)	ND	(31)	ND	(31)	ND
Bromodichloroethane	100 MCL	ND	(180)	ND	(140)	ND	(14)	ND	(25)	ND	(25)	ND
Bromoform	100 MCL	ND	(240)	ND	(190)	ND	(19)	ND	(33)	ND	(33)	ND
Bromoethane	NE	ND	(250)	ND	(200)	ND	(20)	ND	(35)	ND	(35)	ND
Carbon Disulfide	NE	ND	(250)	ND	(200)	ND	(20)	ND	(35)	ND	(35)	ND
Carbon Tetrachloride	0.5 MCL	ND	(140)	ND	(110)	ND	(11)	ND	(20)	ND	(20)	ND
Chlorobenzene	30 AL	ND	(250)	ND	(200)	ND	(20)	ND	(35)	ND	(35)	ND
Chloroethane	NE	ND	(130)	ND	(100)	ND	(10)	ND	(18)	ND	(18)	ND
Chloroform	100 MCL	ND	(250)	ND	(200)	ND	(20)	ND	(35)	ND	(35)	ND
Chloroethane	NE	ND	(250)	ND	(200)	ND	(20)	ND	(35)	ND	(35)	ND
Dibromochloroethane	NE	ND	(160)	ND	(120)	ND	(12)	ND	(22)	ND	(22)	ND
Ethylbenzene	680 MCL	ND	(250)	ND	(200)	ND	(20)	ND	(35)	ND	(35)	ND
Methylene Chloride	NE	ND	(250)	ND	(200)	200	(20)	ND	(35)	ND	(35)	ND
Styrene	NE	ND	(250)	ND	(200)	ND	(20)	ND	(35)	ND	(35)	ND

ALL UNITS ARE ug/L

AL = DHS Action Level  
EW = Extraction well  
I = Result differs from last issue of report  
NA = Not analyzed  
NS = Normal sample  
RAD = Radian Corporation, Sacramento  
U = Unconfirmed, second column not requested  
B = Detected in blank, result not corrected  
FD = Field Duplicate  
MCL = DHS maximum contaminant level  
ND = Not detected at specified detection limit  
P = Previously confirmed  
RAS = Radian Analytical Services, Sacramento  
C = Confirmed on second column  
G = Exceeds calibration range  
MW = Monitoring well  
NE = Threshold value not established  
PMCL = US EPA primary maximum contaminant level



TABLE 1-29 (Continued)

Analytes	Maximum Contaminant Level Or Action Level	EW-73				EW-83				EW-84			
		Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit
Ground Water Zone													
Date Sampled													
Sampled By													
Date Analyzed													
Lab													
Field Analysis													
Lab Analysis													
Tetrachloroethene	5 MCL	ND	(210)	ND	(160)	ND	(160)	ND	(16)	ND	(29)	ND	(29)
Toluene	NE	ND	(250)	ND	(200)	ND	(200)	ND	(20)	ND	(35)	ND	(35)
Total Xylenes	1750 MCL	ND	(250)	ND	(200)	ND	(200)	ND	(20)	ND	(35)	ND	(35)
Trans-1,3-Dichloropropene	NE	ND	(250)	ND	(200)	ND	(200)	ND	(20)	ND	(35)	ND	(35)
Trichloroethene	5 MCL	1000.	(130)	1100	(100)	83	(100)	83	(10)	970	(18)	970	(18)
Vinyl Acetate	NE	ND	(350)	ND	(280)	ND	(280)	ND	(28)	ND	(48)	ND	(48)
Vinyl Chloride	0.5 MCL	1100.	(250)	1300.	(200)	ND	(200)	ND	(20)	430.	(35)	ND	(35)
cis-1,3-Dichloropropene	NE	ND	(250)	ND	(200)	ND	(200)	ND	(20)	ND	(35)	ND	(35)
trans-1,2-Dichloroethene	NE	ND	(250)	ND	(200)	ND	(200)	ND	(20)	ND	(35)	ND	(35)

ALL UNITS ARE ug/L

AL = DHS Action Level  
 EW = Extraction well  
 I = Result differs from last issue of report  
 NA = Not analyzed  
 NS = Normal sample  
 RAD = Radian Corporation, Sacramento  
 U = Unconfirmed, second column not requested

B = Detected in blank, result not corrected  
 FD = Field Duplicate  
 MCL = DHS maximum contaminant level  
 ND = Not detected at specified detection limit  
 P = Previously confirmed  
 RAS = Radian Analytical Services, Sacramento

C = Confirmed on second column  
 G = Exceeds calibration range  
 MW = Monitoring well  
 NE = Threshold value not established  
 PMCL = US. EPA primary maximum contaminant level

TABLE 1-29 (Continued)

Ground Wat & Zone Date Sampled Sampled By Date Analyzed Lab Field Analysis Lab Analysis	WELL NUMBER					
	EW-85		EW-86		EW-87	
	Middle	Middle	Middle	Middle	Middle	Middle
	23-Jan-90	23-Jan-90	23-Jan-90	23-Jan-90	23-Jan-90	23-Jan-90
	RAD	RAD	RAD	RAD	RAD	RAD
	29-Jan-90	29-Jan-90	29-Jan-90	29-Jan-90	29-Jan-90	29-Jan-90
	RAS	RAS	RAS	RAS	RAS	RAS
	NS	NS	NS	NS	NS	NS
	NS	NS	NS	NS	NS	NS
	NS	NS	NS	NS	NS	NS
	NS	NS	NS	NS	NS	NS
	NS	NS	NS	NS	NS	NS
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	NS	NS	NS	NS	NS	NS
	NS	NS	NS	NS	NS	NS
	NS	NS	NS	NS	NS	NS

ALL UNITS ARE ug/l.

AL = DHS Action Level  
EW = Extraction Well  
I = Result differs from last issue of report  
NA = Not analyzed  
NS = Normal sample  
RAD = Radian Corporation, Sacramento  
U = Unconfirmed, second column not requested

B = Detected in blank, result not corrected  
FD = Field Duplicate  
MCL = DHS maximum contaminant level  
ND = Not detected at specified detection limit  
P = Previously confirmed  
RAS = Radian Analytical Services, Sacramento  
(2) = Result obtained from secondary column

C = Confirmed on second column  
G = Exceeds calibration range  
MW = Monitoring well  
NE = Threshold value not established  
PMCL = US EPA primary maximum contaminant level

TABLE 1-29 (Continued)

Ground Water Zone Date Sampled Sampled By Date Analyzed Lab Field Analysis Lab Analysis	WELL NUMBER			
	EW-85	EW-86	EW-87	
	Middle 23-Jan-90 RAD 29-Jan-90 RAS NS NS	Middle 23-Jan-90 RAD 28-Jan-90 RAS NS NS	Middle 23-Jan-90 RAD 28-Jan-90 RAS NS NS	
	Maximum Contaminant Level Or Action Level	Detection Limit	Detection Limit	Detection Limit
Analytes	Result	Result	Result	Result
Toluene	NE	ND	ND	ND
Total Xylenes	1750 MCL	ND	ND	ND
Trans-1,3-Dichloropropene	NE	ND	ND	ND
Trichloroethene	5 MCL	19	59	59
Vinyl Acetate	NE	ND	ND	ND
Vinyl Chloride	0.5 MCL	ND	ND	ND
cis-1,3-Dichloropropene	NE	ND	ND	ND
trans-1,2-Dichloroethene	NE	ND	ND	ND

ALL UNITS ARE ug/L

AL = DHS Action Level  
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NS = Normal sample  
RAD = Radian Corporation, Sacramento  
U = Unconfirmed, second column not requested

B = Detected in blank, result not corrected  
PD = Field Duplicate  
MCL = DHS maximum contaminant level  
ND = Not detected at specified detection limit  
P = Previously confirmed  
RAS = Radian Analytical Services, Sacramento  
(2) = Result obtained from secondary column

C = Confirmed on second column  
G = Exceeds calibration range  
MW = Monitoring well  
NE = Threshold value not established  
PMCL = US. EPA primary maximum contaminant level

TABLE 1-30 MASTER LOG OF WELLS SAMPLED FOR METHOD 6010 FOR AREA D AND ADJACENT ON BASE AREAS,  
GROUNDWATER SAMPLING AND ANALYSIS PROGRAM,  
JANUARY TO MARCH 1990, MCCLELLAN AIR FORCE BASE

		WELL NUMBER															
		MW-85				MW-10				MW-54				MW-70			
Ground Water Zone		Middle				Shallow				Middle				Middle			
Date Sampled	Sampled By	23-Jan-90	23-Jan-90	23-Jan-90	23-Jan-90	21-Feb-90	21-Feb-90	21-Feb-90	21-Feb-90	25-Jan-90	25-Jan-90	25-Jan-90	25-Jan-90	25-Jan-90			
Date Analyzed	Lab	RAD	RAD	RAD	RAD	RAD	RAD	RAD	RAD	RAD	RAD	RAD	RAD	RAD			
Field Analysis	Lab	29-Jan-90	29-Jan-90	29-Jan-90	29-Jan-90	01-Mar-90	01-Mar-90	01-Mar-90	01-Mar-90	30-Jan-90	30-Jan-90	30-Jan-90	30-Jan-90	31-Jan-90			
Lab Analysis	Lab	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS			
		Maximum Contaminant Level Or Action Level				Detection Limit				Detection Limit				Detection Limit			
Analytes		Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit		
Aluminum	1	ND	(0.045)	4.3	(0.045)	ND	(0.034)	ND	(0.034)	ND	(0.045)	0.11	(0.045)	ND	(0.045)		
Antimony	NE	ND	(0.034)	ND	(0.034)	ND	(0.053)	ND	(0.053)	ND	(0.034)	ND	(0.034)	ND	(0.034)		
Arsenic	0.05	ND	(0.053)	ND	(0.053)	ND	(0.002)	ND	(0.002)	ND	(0.053)	ND	(0.053)	ND	(0.053)		
Barium	1	0.050	(0.002)	0.22	(0.002)	ND	(0.001)	ND	(0.001)	0.15	(0.002)	0.029	(0.002)	ND	(0.002)		
Beryllium	NE	ND	(0.001)	ND	(0.001)	ND	(0.006)	ND	(0.006)	ND	(0.001)	ND	(0.001)	ND	(0.001)		
Boron	NE	0.31 B	(0.006)	0.27	(0.006)	ND	(0.004)	ND	(0.004)	0.36 B	(0.006)	0.21 B	(0.006)	ND	(0.006)		
Cadmium	0.01	ND	(0.004)	ND	(0.004)	ND	(0.001)	ND	(0.001)	ND	(0.004)	ND	(0.004)	ND	(0.004)		
Calcium	NE	15	(0.01)	69.	(0.01)	ND	(0.007)	ND	(0.007)	14	(0.01)	15	(0.01)	ND	(0.01)		
Chromium	0.05	0.015	(0.007)	ND	(0.007)	ND	(0.007)	ND	(0.007)	ND	(0.007)	0.010	(0.007)	ND	(0.007)		
Cobalt	NE	ND	(0.006)	0.023	(0.006)	ND	(0.006)	ND	(0.006)	0.011	(0.006)	ND	(0.006)	ND	(0.006)		
Copper	NE	0.010	(0.007)	4.3	(0.007)	ND	(0.007)	ND	(0.007)	1.4 B	(0.007)	0.20	(0.007)	ND	(0.007)		
Iron	NE	0.34	(0.042)	ND	(0.042)	ND	(0.042)	ND	(0.042)	ND	(0.042)	ND	(0.042)	ND	(0.042)		
Lead	0.05	ND	(0.03)	51.	(0.03)	ND	(0.03)	ND	(0.03)	11	(0.03)	9.2	(0.03)	ND	(0.03)		
Magnesium	NE	11.	(0.002)	0.23	(0.002)	ND	(0.008)	ND	(0.008)	1.2	(0.002)	0.019	(0.002)	ND	(0.002)		
Manganese	NE	ND	(0.008)	ND	(0.008)	ND	(0.015)	ND	(0.015)	ND	(0.008)	ND	(0.008)	ND	(0.008)		
Molybdenum	NE	ND	(0.015)	0.073	(0.015)	ND	(3)	ND	(3)	ND	(0.015)	ND	(0.015)	ND	(0.015)		
Nickel	NE	ND	(3)	ND	(3)	ND	(0.075)	ND	(0.075)	ND	(3)	ND	(3)	ND	(3)		
Potassium	NE	ND	(0.075)	ND	(0.075)	ND	(0.058)	ND	(0.058)	ND	(0.075)	ND	(0.075)	ND	(0.075)		
Selenium	0.01	ND	(0.058)	49	(0.058)	ND	(0.007)	ND	(0.007)	38	(0.058)	50.	(0.058)	ND	(0.058)		
Silicon	NE	37.	(0.007)	ND	(0.007)	ND	(0.029)	ND	(0.029)	18	(0.007)	ND	(0.007)	ND	(0.007)		
Silver	0.05	ND	(0.029)	30	(0.029)	ND	(0.051)	ND	(0.051)	18.	(0.029)	18.	(0.029)	ND	(0.029)		
Sodium	NE	17.	(0.051)	ND	(0.051)	ND	(0.008)	ND	(0.008)	ND	(0.051)	ND	(0.051)	ND	(0.051)		
Thallium	NE	ND	(0.008)	0.036	(0.008)	ND	(0.002)	0.036	(0.008)	ND	(0.008)	0.038	(0.008)	ND	(0.008)		
Vanadium	NE	0.033	(0.002)	0.032	(0.002)	ND	(0.002)	0.032	(0.002)	0.0040	(0.002)	0.0050	(0.002)	ND	(0.002)		
Zinc	NE	0.025 B	(0.002)	ND	(0.002)	ND	(0.002)	ND	(0.002)	ND	(0.002)	ND	(0.002)	ND	(0.002)		

ALL UNITS ARE mg/L

AJ = DHS Action Level  
EW = Extraction Well  
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U = Unconfirmed, second column not requested

B = Detected in blank, result not corrected  
FD = Field Duplicate  
MCL = DHS maximum contaminant level  
ND = Not detected at specified detection limit  
P = Previously confirmed  
RAS = Radian Analytical Services, Sacramento

C = Confirmed on second column  
G = Exceeds calibration range  
MW = Monitoring well  
NE = Threshold value not established  
PMCL = US EPA primary maximum contaminant level  
S = Determined by method of standard addition

TABLE 1-30 (Cont Inued )

Ground Water Zone Date Sampled Sampled By Date Analyzed Lab Field Analysis Lab Analysis	Maximum Contaminant Level Or Action Level	MW-89			MW-92			MW-104		
		Shallow	Shallow	Shallow	Shallow	Shallow	Shallow	Deep A	Deep A	Deep A
		29-Jan-90	17-Jan-90	17-Jan-90	17-Jan-90	17-Jan-90	17-Jan-90	30-Jan-90	30-Jan-90	30-Jan-90
		RAD	RAD	RAD	RAD	RAD	RAD	RAD	RAD	RAD
		RAS	RAS	RAS	RAS	RAS	RAS	RAS	RAS	RAS
		NS	NS	NS	NS	NS	NS	NS	NS	NS
		NS	NS	NS	NS	NS	NS	NS	NS	NS
Analytes		Detection Limit	Detection Limit	Detection Limit	Detection Limit	Detection Limit	Detection Limit	Detection Limit	Detection Limit	Detection Limit
Aluminum	1 MCL	ND	ND	(0.045)	ND	(0.045)	ND	(0.045)	ND	(0.045)
Antimony	NE	ND	ND	(0.034)	ND	(0.034)	ND	(0.034)	ND	(0.034)
Arsenic	0.05 MCL	ND	ND	(0.053)	ND	(0.053)	ND	(0.053)	ND	(0.053)
Barium	1 MCL	0.029	0.033	(0.002)	0.033	(0.002)	0.033	(0.002)	0.048	(0.002)
Beryllium	NE	ND	ND	(0.001)	ND	(0.001)	ND	(0.001)	ND	(0.001)
Boron	NE	0.37	0.47	(0.006)	0.47	(0.006)	0.36	(0.006)	0.30	(0.006)
Cadmium	0.01 MCL	ND	ND	(0.004)	ND	(0.004)	ND	(0.004)	ND	(0.004)
Calcium	NE	12 B	13	(0.01)	13	(0.01)	13	(0.01)	16 B	(0.01)
Chromium	0.05 MCL	0.013	ND	(0.007)	ND	(0.007)	ND	(0.007)	0.014	(0.007)
Cobalt	NE	ND	ND	(0.007)	ND	(0.007)	ND	(0.007)	ND	(0.007)
Copper	NE	0.040	0.014	(0.006)	0.014	(0.006)	0.014	(0.006)	0.017	(0.006)
Iron	NE	0.076 B	0.25	(0.007)	0.25	(0.007)	0.24	(0.007)	0.024 B	(0.007)
Lead	0.05 MCL	ND	ND	(0.042)	ND	(0.042)	ND	(0.042)	ND	(0.042)
Magnesium	NE	8.6	9.3	(0.03)	9.3	(0.03)	9.3	(0.03)	12	(0.03)
Manganese	NE	0.017	0.052	(0.002)	0.052	(0.002)	0.052	(0.002)	ND	(0.002)
Molybdenum	NE	ND	0.011 B	(0.008)	0.011 B	(0.008)	ND	(0.008)	0.011	(0.008)
Nickel	NE	ND	ND	(0.015)	ND	(0.015)	ND	(0.015)	ND	(0.015)
Potassium	NE	ND	ND	(3)	ND	(3)	ND	(3)	ND	(3)
Selenium	0.01 MCL	ND	ND	(0.075)	ND	(0.075)	ND	(0.075)	ND	(0.075)
Silicon	NE	38. B	34.	(0.058)	34.	(0.058)	34	(0.058)	36 B	(0.058)
Silver	0.05 MCL	ND	ND	(0.007)	ND	(0.007)	ND	(0.007)	ND	(0.007)
Sodium	NE	16.	17	(0.029)	17	(0.029)	17	(0.029)	23	(0.029)
Thallium	NE	ND	ND	(0.051)	ND	(0.051)	ND	(0.051)	ND	(0.051)
Vanadium	NE	0.032	0.023	(0.008)	0.023	(0.008)	0.023	(0.008)	0.036	(0.008)
Zinc	NE	0.040 B	0.0040	(0.002)	0.0040	(0.002)	0.0020	(0.002)	0.021 B	(0.002)

ALL UNITS ARE mg/L

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EW = Extraction well  
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U = Unconfirmed, second column not requested
- B = Detected in blank, result not corrected  
FD = Field Duplicate  
MCL = DHS maximum contaminant level  
ND = Not detected at specified detection limit  
P = Previously confirmed  
RAS = Radian Analytical Services, Sacramento
- C = Confirmed on second column  
G = Exceeds calibration range  
MW = Monitoring well  
NE = Threshold value not established  
PHCL = US. EPA primary maximum contaminant level  
S = Determined by method of standard addition

TABLE 1-31. MASTER LOG OF WELLS SAMPLED FOR METHOD 7196 FOR AREA D AND ADJACENT ON-BASE AREAS,  
GROUNDWATER SAMPLING AND ANALYSIS PROGRAM,  
JANUARY TO MARCH 1990, MCCLELLAN AIR FORCE BASE

Ground Water Zone Date Sampled Sampled By Date Analyzed Lab Field Analysis Lab Analysis	WELL NUMBER			WELL NUMBER			WELL NUMBER		
	EW-85	MW-10	MW-54	MW-10	MW-54	MW-70	EW-85	MW-10	MW-54
	Middle 23-Jan-90 RAD 24-Jan-90 RAS NS NS	Shallow 21-Feb-90 RAD 22-Feb-90 RAS NS NS	Middle 24-Jan-90 RAD 25-Jan-90 RAS NS NS	Middle 21-Feb-90 RAD 22-Feb-90 RAS NS NS	Middle 24-Jan-90 RAD 25-Jan-90 RAS NS NS	Middle 25-Jan-90 RAD 25-Jan-90 RAS NS NS			
Analytes	Maximum Contaminant Level Or Action Level	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit	Result	Detection Limit
Chromium, Hexavalent	50 PMCL	ND	(0.02)	ND	(0.02)	ND	(0.02)	ND	(0.02)

ALL UNITS ARE mg/L

AL = DHS Action Level  
EW = Extraction well  
I = Result differs from last issue of report  
MA = Not analyzed  
NS = Normal sample  
RAD = Radian Corporation, Sacramento  
U = Unconfirmed, second column not requested

B = Detected in blank, result not corrected  
FD = Field Duplicate  
MCL = DHS maximum contaminant level  
ND = Not detected at specified detection limit  
P = Previously confirmed  
RAS = Radian Analytical Services, Sacramento

C = Confirmed on second column  
G = Exceeds calibration range  
MW = Monitoring well  
NE = Threshold value not established  
PMCL = US. EPA primary maximum contaminant level  
S = Determined by method of standard addition

TABLE 1-31 (Continued)

Ground Water Zone Date Sampled Sampled By Date Analyzed Lab Field Analysis Lab Analysis	MW-89			MW 92			MW 92			MW-104		
	Maximum Contaminant Level Or Action Level	Result	Detection Limit	Result	Detection Limit	Result	Result	Detection Limit	Result	Result	Detection Limit	Result
Chromium, Hexavalent	50 PHCL	ND	(0.02)	ND	(0.02)	ND	ND	(0.02)	ND	ND	(0.02)	ND

ALL UNITS ARE mg/l

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 I = Result differs from last issue of report  
 NA = Not analyzed  
 NS = Normal sample  
 RAD = Radian Corporation, Sacramento  
 U = Unconfirmed, second column not requested
- B = Detected in blank, result not corrected  
 FD = Field Duplicate  
 MCL = DHS maximum contaminant level  
 ND = Not detected at specified detection limit  
 P = Previously confirmed  
 RAS = Radian Analytical Services, Sacramento
- C = Confirmed on second column  
 G = Exceeds calibration range  
 MW = Monitoring well  
 NE = Threshold value not established  
 PHCL = US EPA primary maximum contaminant level  
 S = Determined by method of standard addition

TABLE 1-32 MASTER LOG OF WELLS SAMPLED FOR METHOD 8010 FOR THE NORTHWEST AREA,  
GROUNDWATER SAMPLING AND ANALYSIS PROGRAM,  
JANUARY TO MARCH 1990, McCLELLAN AIR FORCE BASE

Ground Water Zone Date Sampled Sampled By Date Analyzed Lab Field Analysis Lab Analysis	MW-74			MW-76			MW-1001			MW-1002		
	Middle			Middle			Deep A			Shallow		
	27-Feb-90	28-Feb-90	01-Mar-90	28-Feb-90	01-Mar-90	04-Feb-90	31-Jan-90	17-Jan-90				
	RAD	RAD	RAS	RAD	RAS	RAS	RAD	RAD				
	RAS	RAS	NS	RAS	NS	NS	RAS	RAS				
	NS	NS	NS	NS	NS	NS	NS	NS				
	NS	NS	NS	NS	NS	NS	NS	NS				
Analytes	Maximum Contaminant Level Or Action Level			Detection Limit			Detection Limit			Detection Limit		
	Result			Result			Result			Result		
1,1,1,2-Tetrachloroethane	NE	ND	ND	(5)	ND	ND	(5)	ND	ND	(5)	ND	(5)
1,1,1-Trichloroethane	200	MCL	ND	(0.2)	ND	ND	(0.2)	ND	ND	(0.2)	ND	(0.2)
1,1,2,2-Tetrachloroethane	1	MCL	ND	(0.15)	ND	ND	(0.15)	ND	ND	(0.15)	ND	(0.15)
1,1,2-Trichloroethane	32	MCL	ND	(0.2)	ND	ND	(0.2)	ND	ND	(0.2)	ND	(0.2)
1,1-Dichloroethane	NR	ND	ND	(0.5)	ND	ND	(0.5)	ND	ND	(0.5)	ND	(0.5)
1,1-Dichloroethene	6	MCL	ND	(0.2)	ND	ND	(0.2)	ND	ND	(0.2)	ND	(0.2)
1,2,3-Trichloropropane	NE	ND	ND	(5)	ND	ND	(5)	ND	ND	(5)	ND	(5)
1,2-Dichlorobenzene	NE	ND	ND	(0.5)	ND	ND	(0.5)	ND	ND	(0.5)	ND	(0.5)
1,2-Dichloroethane	0.5	MCL	ND	(0.1)	ND	ND	(0.1)	ND	ND	(0.1)	ND	(0.1)
1,2-Dichloropropane	5	PMCL	ND	(0.1)	ND	ND	(0.1)	ND	ND	(0.1)	ND	(0.1)
1,3-Dichlorobenzene	130	MCL	ND	(0.32)	ND	ND	(0.32)	ND	ND	(0.32)	ND	(0.32)
1,4-Dichlorobenzene	5	MCL	ND	(0.24)	ND	ND	(0.24)	ND	ND	(0.24)	ND	(0.24)
1-Chlorobenzene	NE	ND	ND	(5)	ND	ND	(5)	ND	ND	(5)	ND	(5)
2-Chloroethylvinyl ether	NE	ND	ND	(0.5)	ND	ND	(0.5)	ND	ND	(0.5)	ND	(0.5)
Benzyl Chloride	NE	ND	ND	(10)	ND	ND	(10)	ND	ND	(10)	ND	(10)
Bromobenzene	NE	ND	ND	(5)	ND	ND	(5)	ND	ND	(5)	ND	(5)
Bromodichloromethane	100	PMCL	ND	(0.1)	ND	ND	(0.1)	ND	ND	(0.1)	ND	(0.1)
Bromofluoromethane	100	PMCL	ND	(0.5)	ND	ND	(0.5)	ND	ND	(0.5)	ND	(0.5)
Bromomethane	NE	ND	ND	(1.2)	ND	ND	(1.2)	ND	ND	(1.2)	ND	(1.2)
Carbon Tetrachloride	0.5	MCL	ND	(0.12)	ND	ND	(0.12)	ND	ND	(0.12)	ND	(0.12)
Chlorobenzene	30	AL	ND	(0.25)	ND	ND	(0.25)	ND	ND	(0.25)	ND	(0.25)
Chloroethane	NE	ND	ND	(0.52)	ND	ND	(0.52)	ND	ND	(0.52)	ND	(0.52)
Chloroform	100	PMCL	ND, I	(0.1)	ND	ND	(0.1)	ND	ND	(0.1)	ND	(0.1)
Chloromethane	NE	ND	ND	(0.3)	ND	ND	(0.3)	ND	ND	(0.3)	ND	(0.3)
Dibromochloromethane	100	PMCL	ND	(0.2)	ND	ND	(0.2)	ND	ND	(0.2)	ND	(0.2)
Dibromomethane	NE	ND	ND	(5)	ND	ND	(5)	ND	ND	(5)	ND	(5)

ALL UNITS ARE ug/L

AL = DHS Action Level  
EW = Extraction well  
I = Result differs from last issue of report  
NA = Not analyzed  
NS = Normal sample  
RAD = Radon Corporation, Sacramento  
U = Unconfirmed, second column not requested  
(a), (b), (c) = Result qualified due to one of the following analytical considerations:  
(a) = Coelution  
(b) = Interference  
(c) = Random error  
B = Detected in blank, result not corrected  
FD = Field Duplicate  
MCL = DHS maximum contaminant level  
ND = Not detected at specified detection limit  
P = Previously confirmed  
RAS = Radon Analytical Services, Sacramento  
(2) = Result obtained from secondary column  
C = Confirmed on second column  
G = Exceeds calibration range  
MW = Monitoring well  
NE = Threshold value not established  
PMCL = US EPA primary maximum contaminant level



TABLE 1-32 (Continued)

		WELL NUMBER					
		MW-74	MW-76	MW-1001	MW-1002		
Ground Water Zone		Middle	Middle	Deep A	Shallow		
Date Sampled		27-Feb-90	28-Feb-90	31-Jan-90	17-Jan-90		
Sampled By		RAD	RAD	RAD	RAD		
Date Analyzed		28-Feb-90	01-Mar-90	04-Feb-90	08-Jan-90		
Lab		RAS	RAS	RAS	RAS		
Field Analysis		NS	NS	NS	NS		
Lab Analysis		NS	NS	NS	NS		
Maximum Contaminant Level Or Action Level		Detection Limit		Detection Limit		Detection Limit	
Analytes		Result	Result	Result	Result	Result	Limit
Methylene Chloride	NE	ND	ND	ND	ND	ND	(0.4)
Tetrachloroethane	5	ND	ND	ND	ND	ND	(0.1)
Total 1,2-Dichloroethane	16	0.59 CI	ND	ND	ND	ND	(0.2)
Total Chlorotoluene	NE	ND	ND	ND	ND	ND	(25)
Trans-1,3-Dichloropropene	NE	ND	ND	ND	ND	ND	(0.34)
Trichloroethane	5	4.8 CI	ND	ND	ND	ND	(0.2)
Trichlorofluoromethane	150	ND	ND	ND	ND	ND	(0.2)
Vinyl Chloride	0.5	ND	ND	ND	ND	ND	(0.2)
bis(2-Chloroisopropyl)Ether	NE	ND	ND	ND	ND	ND	(10)
cis-1,3-Dichloropropene	NE	ND	ND	ND	ND	ND	(0.2)

ALL UNITS ARE ug/L

AL = DHS Action Level  
 EW = Extraction well  
 I = Result differs from last issue of report  
 NA = Not analyzed  
 NS = Normal sample  
 RAD = Radian Corporation, Sacramento  
 U = Unconfirmed, second column not requested  
 (a), (b), (c) = Result qualified due to one of the following analytical considerations:  
 (a) = Coelution  
 (b) = Interference  
 (c) = Random error

B = Detected in blank, result not corrected  
 FD = Field Duplicate  
 MCL = DHS maximum contaminant level  
 ND = Not detected at specified detection limit  
 P = Previously confirmed  
 RAS = Radian Analytical Services, Sacramento  
 (2) = Result obtained from secondary column

C = Confirmed on second column  
 G = Exceeds calibration range  
 MW = Monitoring well  
 ME = Threshold value not established  
 PMCL = US. EPA primary maximum contaminant level

ALL UNITS ARE "G/L

AL = DHS Action Level  
EW = Extraction well  
I = Result differs from last issue of report  
NA = Not analyzed  
NS = Normal sample  
RAD = Radion Corporation, Sacramento  
U = Unconfirmed, second column not requested  
(a), (b), (c) = Result qualified due to one of the following analytical considerations  
(a) = Result  
(b) = Coelution  
(c) = Interference  
3 = Detected in blank, result not corrected  
FD = Field Duplicate  
MCL = DHS maximum contaminant level  
MD = Not detected at specified detection limit  
P = Previously confirmed  
RAS = Radian Analytical Services, Sacramento  
(2) = Result obtained from secondary column  
(b) = Interference  
C = Confirmed on second column  
G = Exceeds calibration range  
MW = Monitoring well  
NE = Threshold value not established  
PMCL = US EPA primary maximum contaminant level  
(c) = Random error

ALL UNITS ARE UG/L

- DHS Action Level	B	= Detected in blank, result not corrected
- Extraction well	FD	= Field Duplicate
- Result differs from last issue of report	MCL	= DHS maximum contaminant level
- Not analysed	ND	= Not detected at specified detection limit
- Normal sample	P	= Previously confirmed
- Radian Corporation, Sacramento	RAS	= Radian Analytical Services, Sacramento
- Unconfirmed, second column not requested	(2)	= Result obtained from secondary column
- Result qualified due to one of the following analytical considerations.		
(a) = Coelution	(b)	= Interference
(c) = Random error	(c)	= Random error

TABLE 1-32 (Continued)

WELL NUMBER

MW-1019

Ground Water Zone  
Date Sampled 01-Feb-90  
Sampled By RAD  
Date Analyzed 11-Feb-90  
Lab RAS  
Field Analysis NS  
Lab Analysis MS

Analytes	Maximum Contaminant Level Or Action Level	Result	Detection Limit
1,1,1,2-Tetrachloroethane	NE	ND	(5)
1,1,1-Trichloroethane	200	ND	(0.2)
1,1,2,2-Tetrachloroethane	1	ND	(0.15)
1,1,2-Trichloroethane	32	ND	(0.2)
1,1-Dichloroethane	NE	5.0 C	(0.5)
1,1-Dichloroethane	6	ND	(0.2)
1,1,2-Trichloropropane	NE	ND	(5)
1,2-Dichlorobenzene	NE	ND	(0.5)
1,2-Dichloroethane	0.5	ND	(0.1)
1,2-Dichloropropane	5	ND	(0.1)
1,3-Dichlorobenzene	130	ND	(0.32)
1,4-Dichlorobenzene	5	ND	(0.24)
1-Chlorohexane	NE	ND	(5)
2-Chloroethylvinylether	NE	ND	(0.5)
Benzyl Chloride	NE	ND	(10)
Bromobenzene	NE	ND	(5)
Bromodichloromethane	100	ND	(0.1)
Bromoform	100	ND	(0.5)
Bromomethane	NE	ND	(1.2)
Carbon Tetrachloride	0.5	ND	(0.12)
Chlorobenzene	30	ND	(0.25)
Chloroethane	NE	ND	(0.52)
Chloroform	100	0.43 (a)	(0.1)
Chloromethane	NE	ND	(0.3)
Dibromochloromethane	100	ND	(0.2)
Dibromomethane	NE	ND	(5)
Methylene Chloride	NE	ND	(0.4)

ALL UNITS ARE ug/L

AL = DHS Action Level  
EW = Extraction well  
I = Result differs from last issue of report  
NA = Not analyzed  
NS = Normal sample  
RAD = Radian Corporation, Sacramento  
U = Unconfirmed, second column not requested  
(a), (b), (c) = Result qualified due to one of the following analytical considerations  
(a) = Coelution  
(b) = Interference  
(c) = Random error  
B = Detected in blank, result not corrected  
FD = Field Duplicate  
MCL = DHS maximum contaminant level  
ND = Not detected at specified detection limit  
P = Previously confirmed  
RAS = Radian Analytical Services, Sacramento  
(2) = Result obtained from secondary column  
C = Confirmed on second column  
G = Exceeds calibration range  
MW = Monitoring well  
NE = Threshold value not established  
PMCL = US EPA primary maximum contaminant level

TABLE 1-32 (Continued)

		MW-1019		WELL NUMBER	
Ground Water Zone		Shallow			
Date Sampled		01-Feb-90			
Sampled By		RAD			
Date Analyzed		11-Feb-90			
Lab		RAS			
Field Analysis		NS			
Lab Analysis		NS			
		Maximum Contaminant		Detection	
		Level Or Action Level	Result	Limit	
Tetrachloroethene		5 MCL	1.0 C	(0.1)	
Total 1,2-Dichloroethene		16 AL	ND	(0.2)	
Total Chlorotoluene		NE	ND	(25)	
Trans-1,3-Dichloropropene		NE	ND	(0.34)	
Trichloroethene		5 MCL	2.1 C	(0.2)	
Trichlorofluoromethane		150 AL	ND	(0.2)	
Vinyl Chloride		0.5 MCL	ND	(0.2)	
bis(2-Chloroisopropyl)Ether		NE	ND	(10)	
cis-1,3-Dichloropropene		NE	ND	(0.2)	

ALL UNITS ARE ug/L

AL = DHS Action Level  
 EW = Extraction well  
 I = Result differs from last issue of report  
 NA = Not analyzed  
 NS = Normal sample  
 RAD = Radian Corporation, Sacramento  
 U = Unconfirmed, second column not requested  
 (a), (b), (c) = Result qualified due to one of the following analytical considerations.  
 (a) = Coelution  
 (b) = Interference  
 (c) = Random error

B = Detected in blank, result not corrected  
 PD = Field Duplicate  
 MCL = DHS maximum contaminant level  
 ND = Not detected at specified detection limit  
 P = Previously confirmed  
 RAS = Radian Analytical Services, Sacramento  
 (2) = Result obtained from secondary column

C = Confirmed on second column  
 G = Exceeds calibration range  
 MW = Monitoring well  
 NE = Threshold value not established  
 PHCL = US. EPA primary maximum contaminant level

TABLE 1-33 MASTER LOG OF WELLS SAMPLED FOR METHOD 8020 FOR THE NORTHWEST AREA,  
GROUNDWATER SAMPLING AND ANALYSIS PROGRAM,  
JANUARY TO MARCH 1990, MCCLELLAN AIR FORCE BASE

Ground Water Zone Date Sampled Sampled By Date Analyzed Lab Field Analysis Lab Analysis	MW-74		MW-76	
	Middle 27-Feb-90 RAD 28-Feb-90 RAS NS NS	Middle 28-Feb-90 RAD 01-Mar-90 RAS NS NS		
Analytes	Maximum Contaminant Level Or Action Level	Detection Limit	Result	Detection Limit
1,2-Dichlorobenzene	NE	(0.4)	ND	(0.4)
1,3-Dichlorobenzene	130	(0.4)	ND	(0.4)
1,4-Dichlorobenzene	5	(0.3)	ND	(0.3)
Benzene	1	(0.2)	ND	(0.2)
Chlorobenzene	30	(0.2)	ND	(0.2)
Ethylbenzene	680	(0.2)	ND	(0.2)
Toluene	NE	(0.2)	ND	(0.2)
Total Xylenes	1750	(0.2)	ND	(0.2)

ALL UNITS ARE ug/L

AL = DHS Action Level  
EW = Extraction well  
I = Result differs from last issue of report  
NA = Not analyzed  
NS = Normal sample  
RAD = Radian Corporation, Sacramento  
U = Unconfirmed, second column not requested  
(a),(b),(c) = Result qualified due to one of the following analytical considerations:  
(a) = Coelution  
(b) = Interference  
(c) = Random error

B = Detected in blank, result not corrected  
FD = Field Duplicate  
MCL = DHS maximum contaminant level  
ND = Not detected at specified detection limit  
P = Previously confirmed  
RAS = Radian Analytical Services, Sacramento  
(2) = Result obtained from secondary column

C = Confirmed on second column  
G = Exceeds calibration range  
MW = Monitoring well  
NE = Threshold value not established  
PMCL = US EPA primary maximum contaminant level

TABLE 1-34 MASTER LOG OF WELLS SAMPLED FOR METHOD 6010 FOR THE NORTHWEST AREA,  
GROUNDWATER SAMPLING AND ANALYSIS PROGRAM,  
JANUARY TO MARCH 1990, MCCLELLAN AIR FORCE BASE

		MW-1001		MW-1003		WELL NUMBER	
Ground Water Zone		Deep A		Middle			
Date Sampled		31-Jan-90		31-Jan-90			
Sampled By		RAD		RAD			
Date Analyzed		02-Feb-90		02-Feb-90			
Lab		RAS		RAS			
Field Analysis		NS		NS			
Lab Analysis		NS		NS			
		Maximum Contaminant		Detection		Detection	
		Level Or Action Level		Limit		Limit	
Analytes		Result		Result		Result	
Aluminum	1	MCL	ND	(0.045)	ND	(0.045)	(0.045)
Antimony	NE		ND	(0.034)	ND	(0.034)	(0.034)
Arsenic	0.05	MCL	ND	(0.053)	ND	(0.053)	(0.053)
Barium	1	MCL	0.044	(0.002)	0.040	(0.002)	(0.002)
Beryllium	NE		ND	(0.001)	ND	(0.001)	(0.001)
Boron	NE		0.37	(0.006)	0.36	(0.006)	(0.006)
Cadmium	0.01	MCL	ND	(0.004)	ND	(0.004)	(0.004)
Calcium	NE		14 B	(0.01)	14 B	(0.01)	(0.01)
Chromium	0.05	MCL	0.015	(0.007)	0.014	(0.007)	(0.007)
Cobalt	NE		ND	(0.007)	ND	(0.007)	(0.007)
Copper	NE		0.014	(0.006)	0.011	(0.006)	(0.006)
Iron	NE		0.027 B	(0.007)	0.015 B	(0.007)	(0.007)
Lead	0.05	MCL	ND	(0.042)	ND	(0.042)	(0.042)
Magnesium	NE		9.6	(0.03)	9.0	(0.03)	(0.03)
Manganese	NE		0.016	(0.002)	0.0090	(0.002)	(0.002)
Molybdenum	NE		0.010	(0.008)	ND	(0.008)	(0.008)
Nickel	NE		0.016	(0.015)	0.036	(0.015)	(0.015)
Potassium	NE		ND	(3)	ND	(3)	(3)
Selenium	0.01	MCL	ND	(0.075)	ND	(0.075)	(0.075)
Silicon	NE		38 B	(0.058)	36 B	(0.058)	(0.058)
Silver	0.05	MCL	ND	(0.007)	ND	(0.007)	(0.007)
Sodium	NE		20.	(0.029)	19	(0.029)	(0.029)
Thallium	NE		ND	(0.051)	ND	(0.051)	(0.051)
Vanadium	NE		0.039	(0.008)	0.032	(0.008)	(0.008)
Zinc	NE		0.013 B	(0.002)	0.020 B	(0.002)	(0.002)

ALL UNITS ARE mg/L

AL = DHS Action Level  
 EW = Extraction well  
 I = Result differs from last issue of report  
 NA = Not analyzed  
 NS = Normal sample  
 RAD = Radian Corporation, Sacramento  
 U = Unconfirmed, second column not requested  
 B = Detected in blank, result not corrected  
 FD = Field Duplicate  
 MCL = DHS maximum contaminant level  
 ND = Not detected at specified detection limit  
 P = Previously confirmed  
 RAS = Radian Analytical Services, Sacramento  
 C = Confirmed on second column  
 G = Exceeds calibration range  
 MW = Monitoring well  
 NE = Threshold value not established  
 PHCL = US EPA primary maximum contaminant level  
 S = Determined by method of standard addition

TABLE 1-35. MASTER LOG OF WELLS SAMPLED FOR METHOD 7196 FOR THE NORTHWEST AREA,  
GROUNDWATER SAMPLING AND ANALYSIS PROGRAM,  
JANUARY TO MARCH 1990, MCCLELLAN AIR FORCE BASE

		MW-1001		MW-1003		WELL NUMBER
Ground Water Zone		Deep A		Middle		
Date Sampled		31-Jan-90		31-Jan-90		
Sampled By		RAD		RAD		
Date Analyzed		01-Feb-90		01-Feb-90		
Lab		RAS		RAS		
Field Analysis		NS		NS		
Lab Analysis		NS		NS		
Analytes		Maximum Contaminant Level Or Action Level		Detection Limit		Detection Limit
Chromium, Hexavalent		50 PMCL		ND (0.02)		ND (0.02)

ALL UNITS ARE mg/L

AL = DHS Action Level  
 EW = Extraction well  
 I = Result differs from last issue of report  
 NA = Not analyzed  
 NS = Normal sample  
 RAD = Radian Corporation, Sacramento  
 U = Unconfirmed, second column not requested

B = Detected in blank, result not corrected  
 FD = Field Duplicate  
 MCL = DHS maximum contaminant level  
 ND = Not detected at specified detection limit  
 P = Previously confirmed  
 RAS = Radian Analytical Services, Sacramento

C = Confirmed on second column  
 G = Exceeds calibration range  
 MW = Monitoring well  
 NE = Threshold value not established  
 PMCL = US. EPA primary maximum contaminant level  
 S = Determined by method of standard addition



TABLE 1-36. MASTER LOG OF WELLS SAMPLED FOR METHOD 8010 FOR OTHER ON-BASE AREAS,  
GROUNDWATER SAMPLING AND ANALYSIS PROGRAM,  
JANUARY TO MARCH 1990, MCLELLAN AIR FORCE BASE

				WELL NUMBER	
				MW-24D	
Ground Water Zone				Middle	
Date Sampled				16-Jan-90	
Sampled By				RAD	
Date Analyzed				17-Jan-90	
Lab				RAS	
Field Analysis				NS	
Lab Analysis				MS	
Maximum Contaminant				Detection	
Analytes	Level Or Action	Result	Limit		
1,1,1,2-Tetrachloroethane	NE	ND	(5)		
1,1,1-Trichloroethane	200	ND	(0.2)		
1,1,2,2-Tetrachloroethane	1	ND	(0.15)		
1,1,2-Trichloroethane	32	ND	(0.2)		
1,1-Dichloroethane	NE	ND	(0.5)		
1,1-Dichloroethane	6	ND	(0.2)		
1,2,3-Trichloropropane	NE	ND	(5)		
1,2-Dichlorobenzene	NE	ND	(0.5)		
1,2-Dichloroethane	0.5	ND	(0.1)		
1,2-Dichloropropane	5	ND	(0.1)		
1,3-Dichlorobenzene	130	ND	(0.32)		
1,4-Dichlorobenzene	5	ND	(0.24)		
1-Chlorobenzene	NE	ND	(5)		
2-Chloroethylvinyl ether	NE	ND	(0.5)		
Benzyl Chloride	NE	ND	(10)		
Bromobenzene	NE	ND	(5)		
Bromodichloromethane	100	ND	(0.1)		
Bromoform	100	ND	(0.5)		
Carbon Tetrachloride	NE	ND	(1.2)		
Chlorobenzene	0.5	ND	(0.12)		
Chloroethane	30	ND	(0.25)		
Chloroform	NE	ND	(0.52)		
Chloromethane	100	ND	(0.1)		
Dibromochloromethane	NE	ND	(0.3)		
Dibromomethane	100	ND	(0.2)		
Dibromomethane	NE	ND	(5)		

ALL UNITS ARE ug/L

AL = DBS Action Level  
EW = Extraction well  
I = Result differs from last issue of report  
NA = Not analyzed  
NS = Normal sample  
RAD = Radian Corporation, Sacramento  
U = Unconfirmed, second column not requested  
(a), (b), (c) = Result qualified due to one of the following analytical considerations.  
(a) = Coelution  
(b) = Interference  
(c) = Random error

B = Detected in blank, result not corrected  
FD = Field Duplicate  
MCL = DBS maximum contaminant level  
ND = Not detected at specified detection limit  
P = Previously confirmed  
RAS = Radian Analytical Services, Sacramento  
(2) = Result obtained from secondary column

C = Confirmed on second column  
G = Exceeds calibration range  
MW = Monitoring well  
NE = Threshold value not established  
PMCL = US EPA primary maximum contaminant level

TABLE 1-36. (Continued )

WELL NUMBER

W-24D

Ground Water Zone

Middle

Date Sampled

16-Jan-90

Sampled By

RAD

Date Analyzed

17-Jan-90

Lab

RAS

Field Analysis

NS

Lab Analysis

NS

Analytes

Maximum Contaminant Level Or Action Level

Result

Detection Limit

Methylene Chloride

NE ND (0.4)

Tetrachloroethane

5 MCL ND (0.1)

Total 1,2-Dichloroethane

16 AL ND (0.2)

Total Chlorotoluene

NE ND (25)

Trans-1,3-Dichloropropene

NE ND (0.34)

Trichloroethane

5 MCL ND (0.2)

Trichlorofluoromethane

150 AL ND (0.2)

Vinyl Chloride

0.5 MCL ND (0.2)

bis(2-Chloroisopropyl)Ether

NE ND (10)

cis-1,3-Dichloropropene

NE ND (0.2)

ALL UNITS ARE ug/L

AL = DHS Action Level

EW = Extraction Well

I = Result differs from last issue of report

NA = Not analyzed

NS = Normal sample

RAD = Radian Corporation, Sacramento

U = Unconfirmed, second column not requested

(a),(b),(c) = Result qualified due to one of the following analytical considerations.

(a) = Coelution

(b) = Interference

B = Detected in blank, result not corrected

FD = Field Duplicate

MCL = DHS maximum contaminant level

ND = Not detected at specified detection limit

P = Previously confirmed

RAS = Radian Analytical Services, Sacramento

(2) = Result obtained from secondary column

(b) = Interference

C = Confirmed on second column

G = Exceeds calibration range

MW = Monitoring well

NE = Threshold value not established

PMCL = US. EPA primary maximum contaminant level

(c) = Random error

TABLE 1-37. MASTER LOG OF WELLS SAMPLED FOR METHOD 6010 FOR OTHER ON-BASE AREAS,  
GROUNDWATER SAMPLING AND ANALYSIS PROGRAM,  
JANUARY TO MARCH 1990, MCLELLAN AIR FORCE BASE

		WELL NUMBER	
Ground Water Zone		MW-24D	
Date Sampled	Middle	16-Jan-90	
Sampled By	RAD		
Date Analyzed	19-Jan-90		
Lab	RAS		
Field Analysis	NS		
Lab Analysis	NS		
Analytes	Maximum Contaminant		Detection Limit
	Level Or Action	Result	
Aluminum	1 MCL	ND	(0.045)
Antimony	NE	ND	(0.034)
Arsenic	0.05 MCL	ND	(0.053)
Barium	1 MCL	0.047	(0.002)
Beryllium	NE	ND	(0.001)
Boron	NE	0.22	(0.006)
Cadmium	0.01 MCL	ND	(0.004)
Calcium	NE	17.	(0.01)
Chromium	0.05 MCL	0.011	(0.007)
Cobalt	NE	ND	(0.007)
Copper	NE	0.025	(0.006)
Iron	NE	0.048	(0.007)
Lead	0.05 MCL	ND	(0.042)
Magnesium	NE	13.	(0.03)
Manganese	NE	0.0090	(0.002)
Molybdenum	NE	ND	(0.008)
Nickel	NE	0.051	(0.015)
Potassium	NE	ND	(3)
Selenium	0.01 MCL	ND	(0.075)
Silicon	NE	37	(0.058)
Silver	0.05 MCL	ND	(0.007)
Sodium	NE	15.	(0.029)
Thallium	NE	ND	(0.051)
Vanadium	NE	0.022	(0.008)
Zinc	NE	0.0070	(0.002)

ALL UNITS ARE mg/L

AL = DHS Action Level  
 EM = Extraction well  
 I = Result differs from last issue of report  
 NA = Not analyzed  
 NS = Normal sample  
 RAD = Radian Corporation, Sacramento  
 U = Unconfirmed, second column not requested

B = Detected in blank, result not corrected  
 FD = Field Duplicate  
 MCL = DHS maximum contaminant level  
 ND = Not detected at specified detection limit  
 P = Previously confirmed  
 RAS = Radian Analytical Services, Sacramento

C = Confirmed on second column  
 G = Exceeds calibration range  
 MW = Monitoring well  
 NE = Threshold value not established  
 PMCL = US. EPA primary maximum contaminant level  
 S = Determined by method of standard addition

TABLE 1-38 MASTER LOG OF WELLS SAMPLED FOR METHOD 7196 FOR OTHER ON-BASE AREAS,  
GROUNDWATER SAMPLING AND ANALYSIS PROGRAM,  
JANUARY TO MARCH 1990, MCLELLAN AIR FORCE BASE

GROUNDWATER SAMPLING AND ANALYSIS PROGRAM		WELL NUMBER
MW-24D		
Ground Water Zone	Middle	
Date Sampled	16-Jan-90	
Sampled By	RAD	
Date Analyzed	17-Jan-90	
Lab	RAS	
Field Analysis	NS	
Lab Analysis	NS	
Maximum Contaminant Level Or Action Level		Detection Limit
Analytes	Result	
Chromium, Hexavalent	50 PMCL	ND (0.02)

ALL UNITS ARE mg/l.

AL = DHS Action Level  
EW = Extraction well  
I = Result differs from last issue of report  
NA = Not analyzed  
NS = Normal sample  
RAD = Radian Corporation, Sacramento  
U = Unconfirmed, second column not requested

B = Detected in blank, result not corrected  
PD = Field Duplicate  
MCL = DHS maximum contaminant level  
ND = Not detected at specified detection limit  
P = Previously confirmed  
RAS = Radian Analytical Services, Sacramento

C = Confirmed on second column  
G = Exceeds calibration range  
MW = Monitoring well  
NE = Threshold value not established  
PMCL = US EPA primary maximum contaminant level  
S = Determined by method of standard addition

## 2.0 EVALUATION OF GROUNDWATER EXTRACTION EXPEDITED RESPONSE ACTIONS

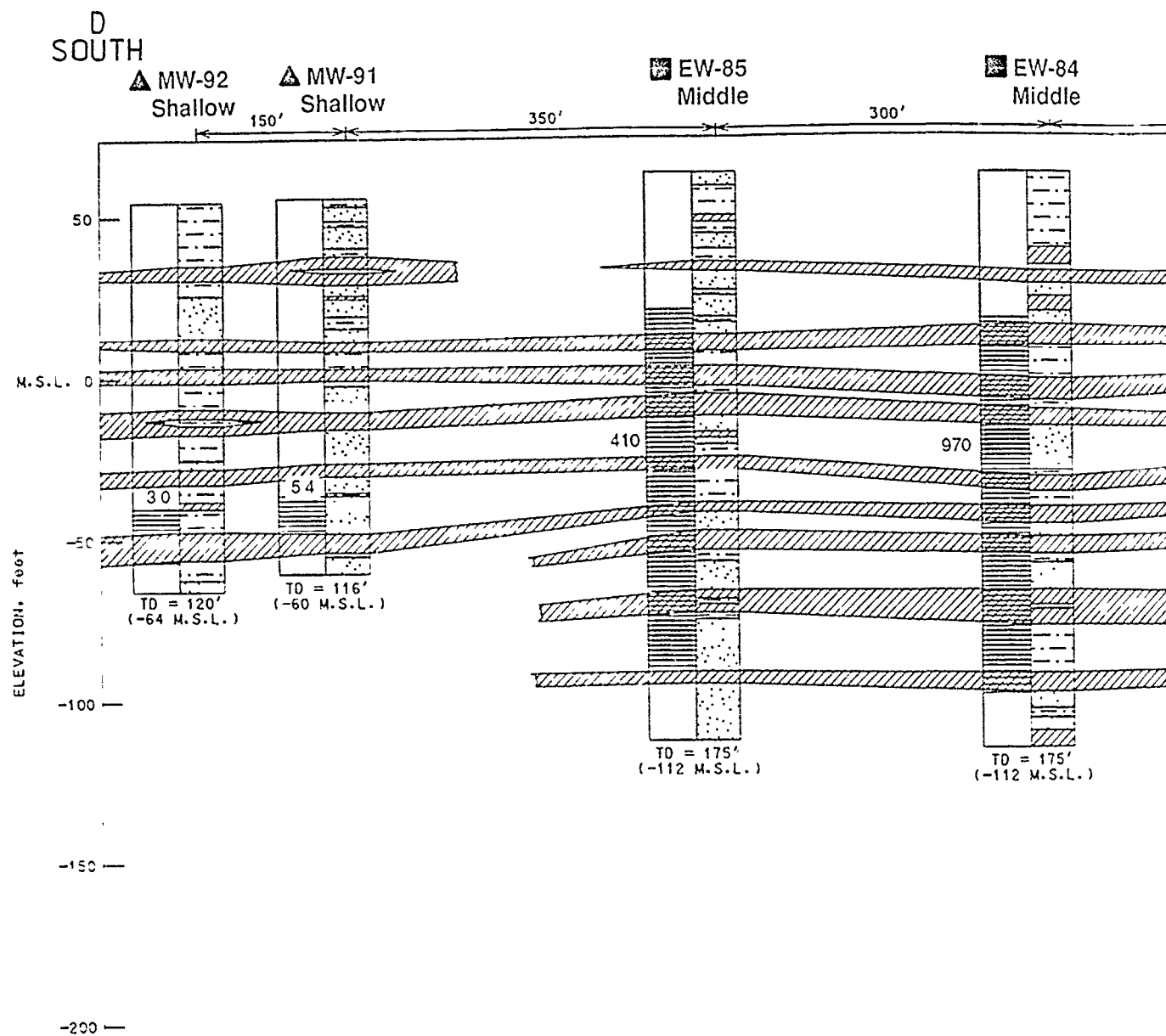
Two Expedited Response Actions (ERA) related to groundwater extraction have been implemented by McClellan Air Force Base (AFB) as a result of the findings of the Groundwater Sampling and Analysis Program and other Remedial Investigation/Feasibility Studies (RI/FS) activities. These include the installation of a synthetic liner/cover, clay cap, and an extraction system in Area D, and installation of a groundwater extraction system in Area C. Pumping of the Area D extraction system began on 15 March 1987 and pumping of the Area C extraction system began on 29 August 1988. The Area C and D extraction systems are discussed below.

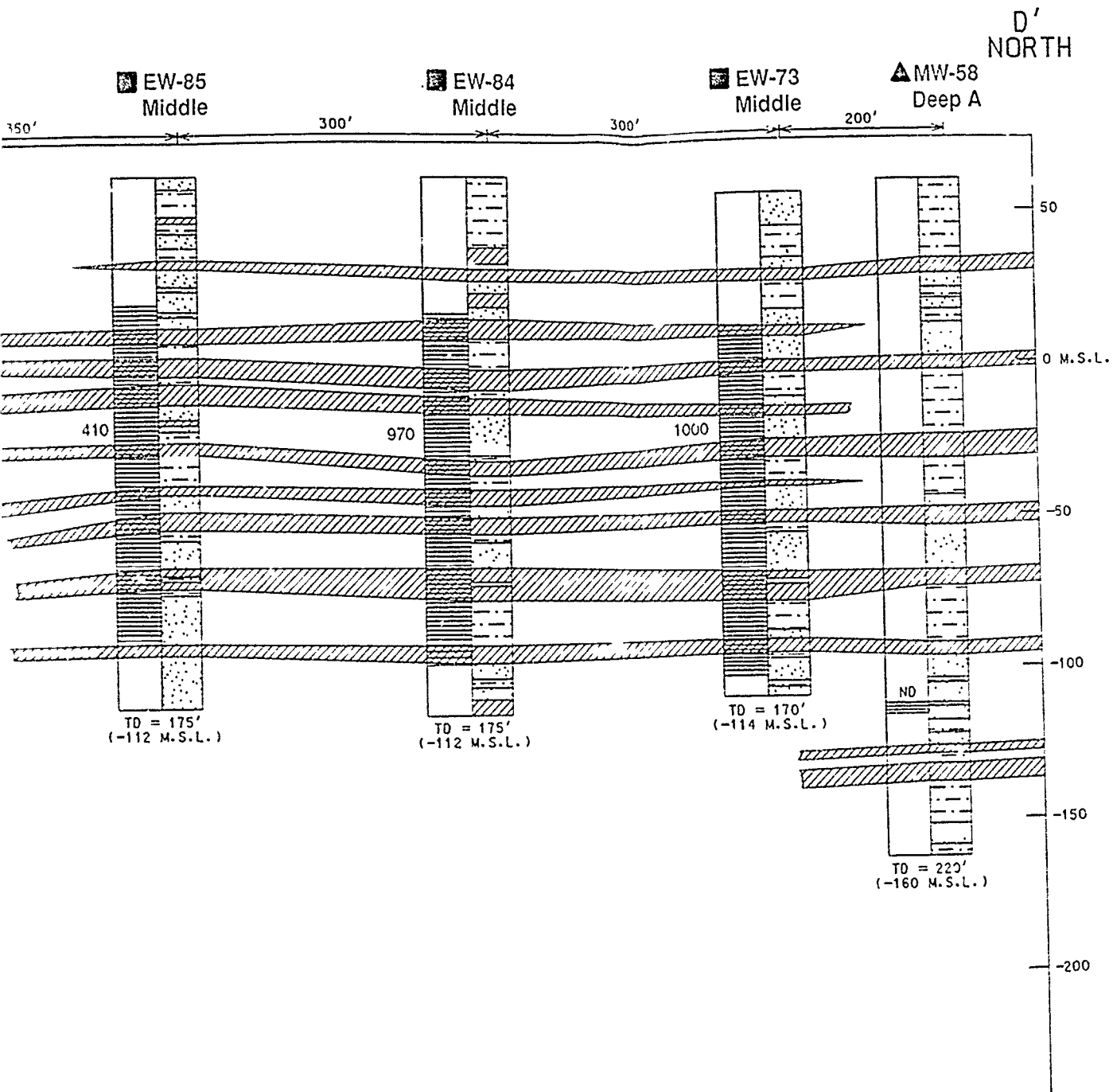
### 2.1 Area D Extraction System

The Area D extraction system consists of six extraction wells located in the area of former sludge/waste pits. The wells are continuously pumped and collectively produce approximately 75 gallons per minute (gpm). The extracted water is then pumped via an aboveground pipeline to the Groundwater Treatment Plant where the water is treated to remove contaminants.

The six extraction wells are all screened from 40 to 160 feet below ground surface (bgs) in the shallow and middle monitoring zones. As shown on the geologic cross section in Figure 2-1, there are alternating sands, silts, and clayey silts at the screen depth of the Area D extraction wells. The cross section traverses Area D from north to south and includes three of the six extraction wells; the surface trace of the cross section is shown in Figure 2-2.

The purpose of the extraction system is to isolate and contain contaminants within Area D (McLaren Environmental Engineering, 1987, p. 33). To accomplish this goal, McLaren recommended pumping the six wells to achieve a combined minimum flow rate of 78 gpm, which would result in a 3-foot drawdown in each of the monitoring wells after one year of pumping. The 78 gpm flow rate was specified to minimize the decline of groundwater levels, thereby prolonging the usefulness of the extraction system. McLaren also recommended that the evaluation of the extraction system's effectiveness be based on gradient controls between specific pairs of wells. The specified gradients were based on minimum head differences of 0.2 feet between the well pairs.





S



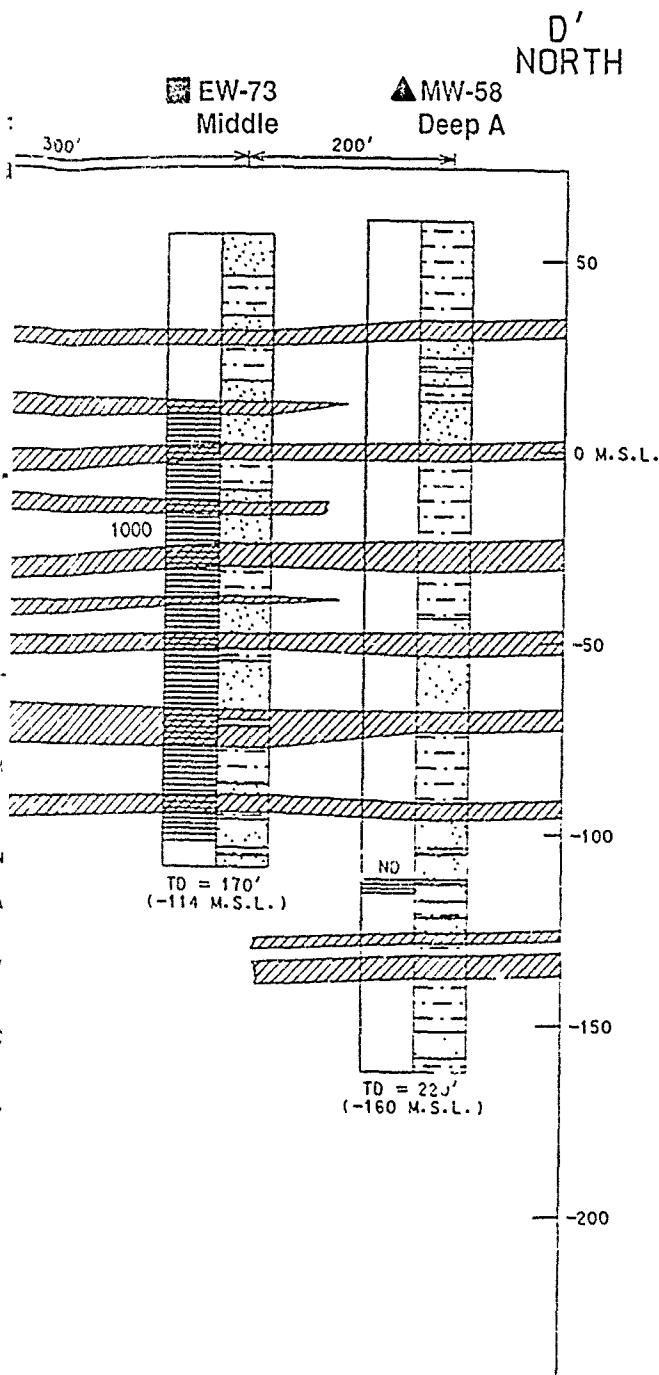


Figure 2-1.  
Subsurface Profile - Area D  
(D - D')

## LEGEND

- ▲ MONITORING WELL (MW)
- EXTRACTION WELL (EW)
- ☼ BASE PRODUCTION WELL (BW)
- M.S.L. MEAN SEA LEVEL
- TD TOTAL DEPTH

- GRAVELLY SAND
- SAND
- SILT
- CLAYEY SILT
- NO DATA
- SCREEN INTERVAL

## SCALE

HS: 1" = 390'  
VS: 1" = 54'  
VE = 7.2

NOTE TCE concentrations are reported next to screen intervals  
in ug/L for January through March 1990 sampling period  
ND = Not Detected

**RADIAN**  
CORPORATION



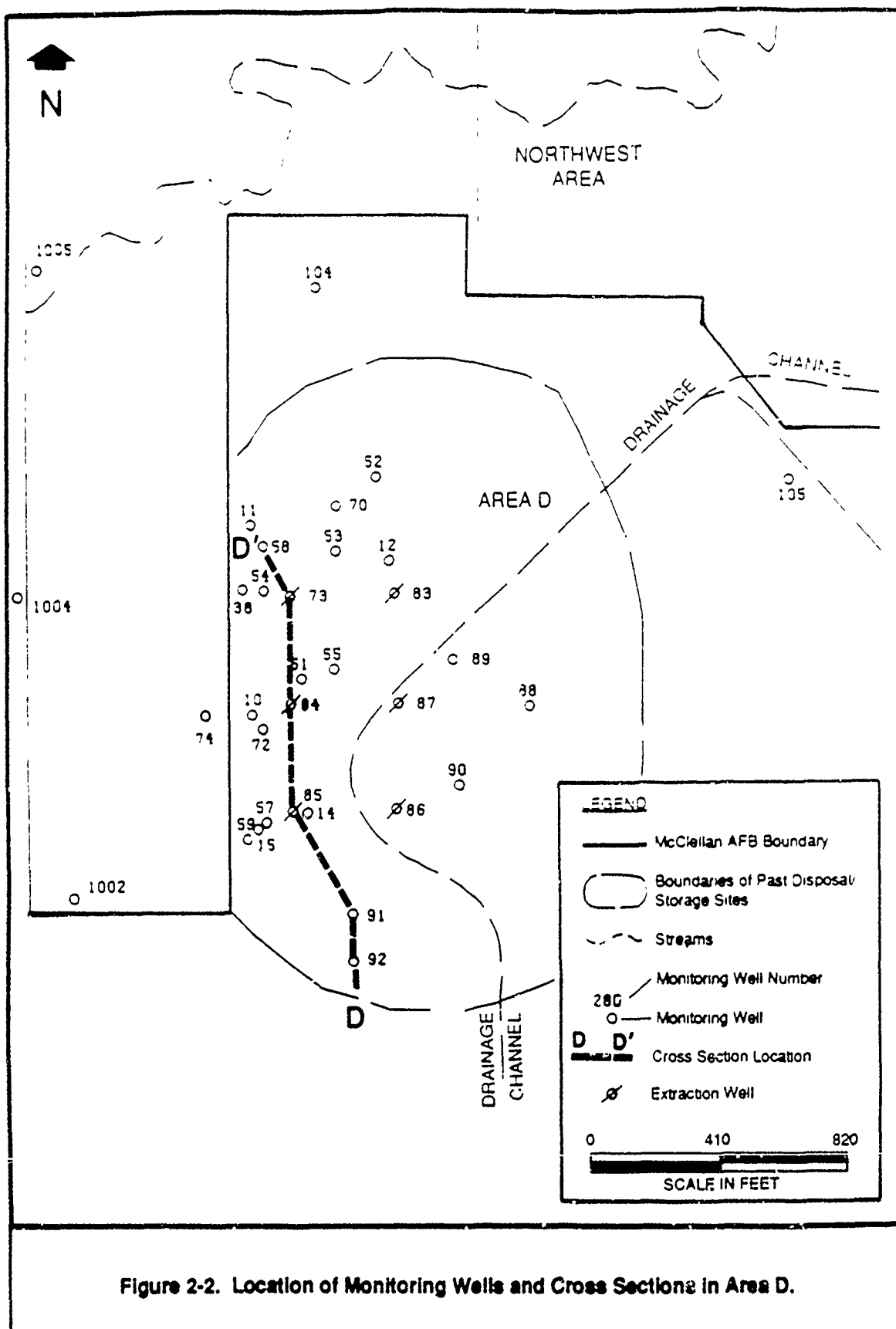


Figure 2-2. Location of Monitoring Wells and Cross Sections in Area D.

The effectiveness of the Area D extraction system is evaluated below based on McLaren's gradient criteria. In addition, changes in contaminant concentrations in several Area D monitoring wells over the period of April 1985 to March 1990 are also reviewed to evaluate the effect of the extraction system on water quality.

### **Groundwater-Level Data**

Groundwater-level data for the McLaren-specified well pairs were measured in early January 1990 prior to groundwater sampling. These data were used to calculate head differences and gradients. Table 2-1 presents the well pairs, calculated head differences and gradients, and McLaren's recommended minimum gradients. As shown in the table, the minimum gradient criteria recommended by McLaren were maintained at the current pumping rate with one exception. The calculated gradient for MW-90 and MW-88 was -0.0002 which is below the recommended gradient of -0.0007. However, the potentiometric surface maps of Area D (Plates 3 and 5) illustrate the containing effects on the groundwater flow directions from pumping of the Area D extraction system. The maps show contours of equal water-level elevations in the shallow, middle and deep monitoring zones beneath Area D; groundwater flow is perpendicular to these contours in the direction of decreasing water-level elevation. In both the shallow and middle monitoring zones, flow is toward the extraction wells (Plates 3 and 4). In the deep "A" zone, groundwater flows from off-base areas in the northwest towards on-base areas in the southeast (Plate 5).

### **Analytical Data**

Analytical results were reviewed for samples collected from shallow, middle, and deep "A" zone monitoring wells located both on base in Area D and off base in the Northwest Area. Time series plots for TCE concentration in 13 of the monitoring wells are shown in Figures 2-3, 2-4, 2-5, and 2-6. The time series plots focus on TCE concentrations, because TCE is the most widely detected compound in the McClellan AFB groundwater monitoring wells, including Area D.

For the purpose of qualitatively evaluating the effectiveness of the extraction system, the historical changes in TCE concentrations from April 1985 through March 1990 were evaluated for selected monitoring wells. Decreasing concentrations are

TABLE 2-1. HEAD DIFFERENCE AND GRADIENTS BETWEEN SELECTED WELL PAIRS  
IN AREA D, JANUARY THROUGH MARCH 1990

Well Pair	Monitoring Zone	Head Difference (feet)	Gradient (feet/foot)	Recommended Minimum Gradient <sup>a</sup> (feet/foot)
MW-53 & MW-70	Middle	-0.77	-0.0061	-0.0016
MW-54 & MW-76	Middle	-0.31	-0.0021	-0.0014
MW-72 & MW-74	Middle	-0.56	-0.0046	-0.0014
MW-89 & MW-88	Shallow	-0.56	-0.0022	-0.0007
MW-90 & MW-88	Shallow	-0.61	-0.0002	-0.0007
MW-91 & MW-92	Shallow	-0.18	-0.0014	-0.0013

NOTE: The first well of the well pair is located closest to the extraction well. A negative head difference indicates a gradient toward the extraction well.

<sup>a</sup> McLaren Environmental Engineering, 1987.

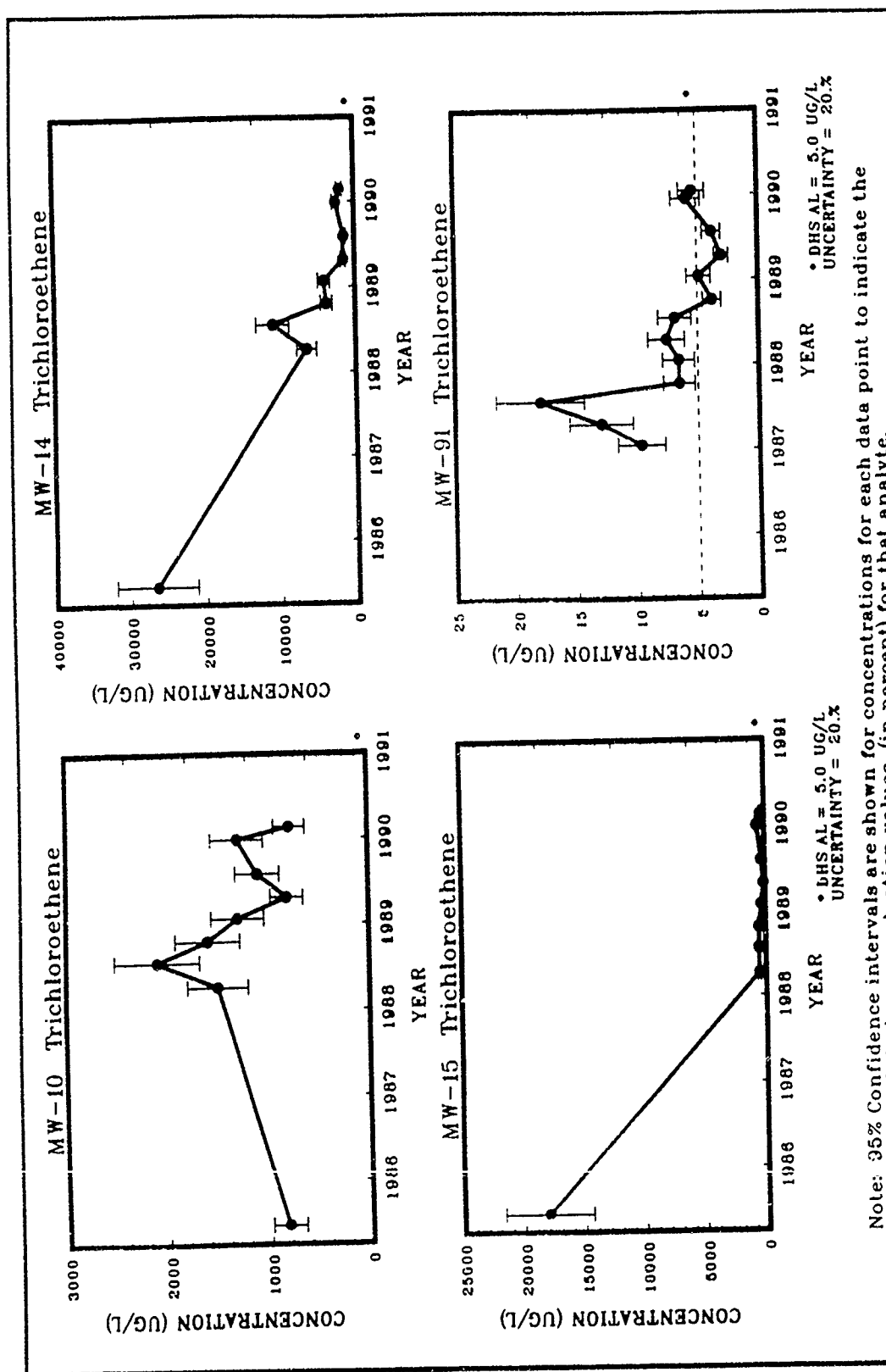


Figure 2-3. Time Series Plots for Selected Shallow Zone Monitoring Wells in Area D.

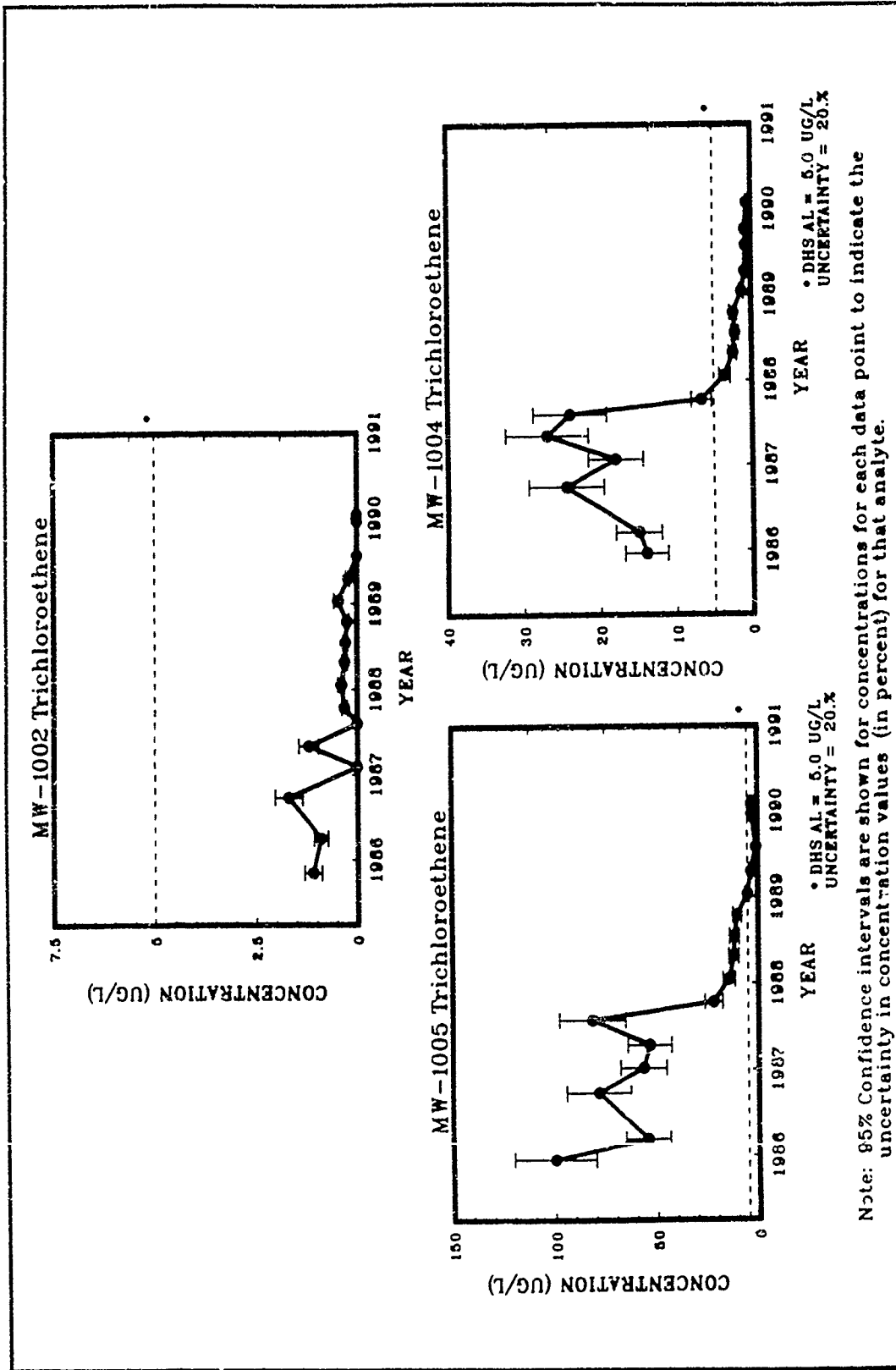


Figure 2-4. Time Series Plots for Selected Shallow Zone Monitoring Wells in the Northwest Area.

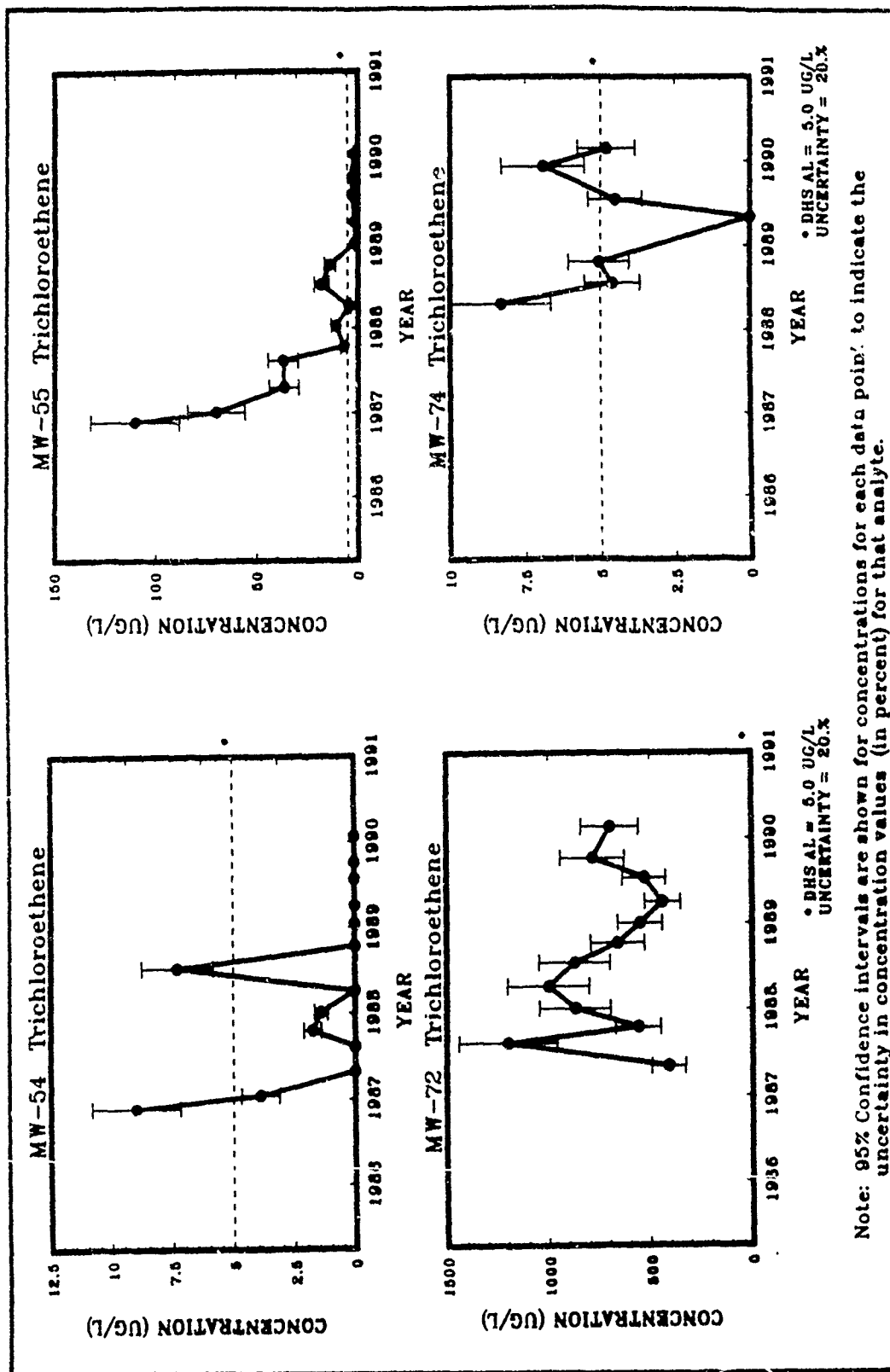
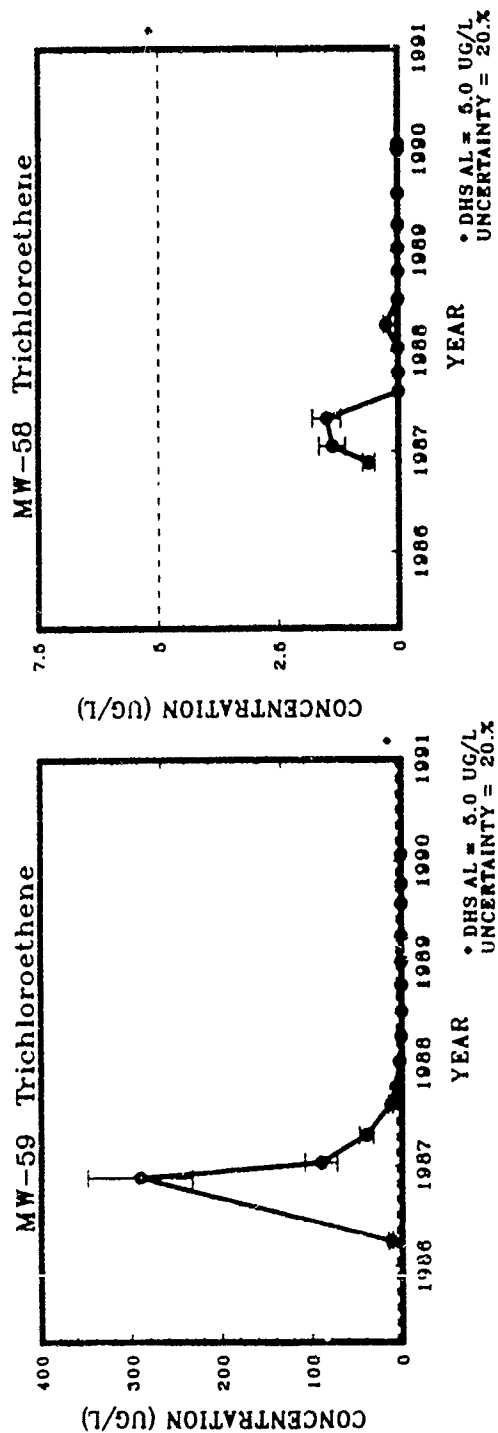


Figure 2-5. Time Series Plots for Selected Middle Zone Monitoring Wells in Area D.

# AREA D DEEP ZONE WELLS



Note: 95% Confidence intervals are shown for concentrations for each data point to indicate the uncertainty in concentration values (in percent) for that analyte.

Figure 2-6. Time Series Plots for Selected Deep Zone Monitoring Wells in Area D.

expected in monitoring wells that are located at the greatest radial distance from the extraction wells, but still within the influence of the wells. Monitoring wells located close to the extraction wells are near both the contaminant sources and the extraction wells that are drawing contaminated groundwater toward the monitoring wells. Therefore, the wells are expected to show greater TCE concentrations over a period of time. The time series plots for the 13 monitoring wells are evaluated below.

Included on each time series plot are "error bars" of  $\pm 20$  percent of the concentration for each data point. The bars represent the sampling uncertainty associated with each reported concentration and are based on statistical analysis of the available data presented in the Annual Technical Report (Radian, 1989). The sampling variability is attributed to both laboratory and field procedures. Thus from one sampling event to another, there must be an increase or decrease of at least 20 percent in order for there to be evidence of a change in TCE concentration in a monitoring well.

Representative time series plots were developed for four shallow zone monitoring wells located in Area D and three shallow zone monitoring wells located approximately 500 feet west of Area D. The on-base monitoring wells are MW-10, MW-14, MW-15, and MW-91 and the off-base wells are MW-1002, MW-1004, and MW-1005. The locations of these wells are shown in Figure 2-2.

The time series plots for MW-10, MW-14, and MW-15 (Figure 2-3) are based on nine sampling events, including one in 1990, four in 1989, three in 1988, and one in 1985. The time series plots for these three wells show that TCE concentrations have decreased, but the concentrations remain above the DHS maximum contaminant level (MCL) of  $5.0 \mu\text{g/L}$  for TCE in drinking water. TCE concentrations in MW-14 and MW-15 have been fairly stable during the past four sampling events. In MW-10, TCE concentrations have fluctuated over the past four sampling events.

In MW-91, TCE concentrations have fluctuated above and below the MCL of  $5.0 \mu\text{g/L}$  for the past six sampling events (Figure 2-3). Concentrations of TCE were below the MCL for four sampling events, but have increased to above the MCL for the past two sampling events. However, the most recently measured concentrations remain below TCE concentrations originally detected in 1987.

As shown in Figure 2-4, the time series plots for the three off-base monitoring wells (MW-1002, MW-1004, and MW-1005) continue to show decreases in TCE concentrations since the wells were initially sampled in 1986. In MW-1002, TCE



has not been detected for the past three sampling events. In MW-1004, TCE concentrations have remained at levels less than 1.0  $\mu\text{g/L}$  for the past four sampling events. The concentration of TCE increased in MW-1005, but TCE concentrations have remained below the MCL for the fourth consecutive quarter. However, the concentration of 1,1-dichloroethene was detected above the MCL of 6  $\mu\text{g/L}$  during the First Quarter 1990.

Overall, the time series plots for the shallow zone monitoring wells located outside the well field generally show decreasing concentrations of TCE. TCE concentrations for monitoring wells located within the well field have shown recent fluctuations over the past five sampling events. Fluctuating concentrations of TCE may be expected in these wells for some time because they are located near extraction wells that are drawing contaminated water toward them.

Figure 2-5 shows four middle zone monitoring wells in or adjacent to Area D for which time series plots were developed. These wells, located near the extraction wells, are MW-54, MW-55, MW-72, and MW-74. Monitoring wells MW-54 and MW-55 are located near EW-73, the extraction well containing the highest contaminant concentrations. Trichloroethene has not been detected in MW-54 for the past six sampling events. Trichloroethene levels in MW-55 have decreased since early 1987 and are now below the MCL. The time series plot for MW-72, located near EW-84, shows that the TCE concentration has decreased since the Fourth Quarter 1989, but still remains above 500  $\mu\text{g/L}$ . The concentration of TCE in MW-74, located just west of the base boundary, remains above the MCL.

Trichloroethene concentrations over time were plotted for two deep "A" zone monitoring wells in Area D. These wells, MW-58 and MW-59, are located northwest of EW-73 and southwest of EW-85, respectively (Figure 2-2). The wells monitor a zone that is deeper than the screened interval of the extraction wells of the area. The time series plots for these two wells are shown in Figure 2-6. Trichloroethene has not been detected in either MW-58 or MW-59 during the past five sampling periods. The TCE concentration patterns for both wells suggest contaminant concentrations in the deep "A" zone are affected by the extraction of groundwater from the shallow and middle monitoring zones. This may be due to the dilution of contaminant concentrations by uncontaminated water in the deep "A" zone flowing toward the extraction system. In addition, the TCE patterns indicate that pumping in the shallow and middle monitoring zones is preventing downward migration of contaminants to the deep "A" zone.

In summary, TCE concentrations in Area D monitoring wells have not increased or decreased uniformly in all locations nor in all zones monitored in Area D. This is evident from the diversity of slopes on time series plots in Figures 2-3, 2-4, 2-5, and 2-6. Concentrations of TCE in monitoring wells located off base, outside the extraction well field continue to be below the MCL. In the shallow zone monitoring wells located near the extraction wells, TCE levels have fluctuated over the last five sampling periods. Concentrations of TCE remain above the MCL, as is expected due to the proximity of the wells to extraction wells. In two of the four middle-zone monitoring wells, MW-54 and MW-55, TCE levels remain below the MCL. Trichloroethene concentrations in MW-72 and MW-74 remain above the MCL. In the two deep "A" zone monitoring wells, TCE concentrations have decreased to below detection levels. The overall concentration patterns indicate that the Area D extraction system is effectively removing contaminants and preventing contaminants from moving off base.

### Conclusions

The Area D extraction system was evaluated on the basis of groundwater-level data and changes over time in contaminant concentrations detected in shallow, middle, and deep "A" zone monitoring wells. The Area D extraction system is apparently effective in containing contaminants as indicated by the potentiometric surface maps which show flow towards the extraction wells. In addition, water-quality data from shallow-zone monitoring wells located outside of the well field indicate that TCE concentrations have decreased to below the MCL or have stabilized since the extraction system began operating in July 1987.

## 2.2 Area C Extraction System

There are four extraction wells in Area C, located along a north-south line shown in Figure 2-7. The average combined flow rate from the extraction wells in Area C is approximately 160 gpm. The extracted groundwater is pumped via an aboveground pipeline to the Groundwater Treatment Plant where the water is treated to remove organic contaminants.

The four extraction wells in Area C are screened within different monitoring zones. Extraction well EW-137 is screened from 162 to 172 feet bgs (deep "A"

monitoring zone). Extraction Well EW-140 is screened from 180 to 190 feet bgs (deep "A" monitoring zone). Extraction Well EW-141 is screened from 230 to 240 feet bgs (deep "B" monitoring zone). Extraction Well EW-144 is screened from 120 to 130 feet bgs and from 165 to 185 feet bgs (middle and deep "A" zones). The geologic units mapped beneath Area C are illustrated on two cross sections shown in Figure 2-8 and 2-9. As shown in the south to north cross section (Figure 2-8), and the east to west cross section (Figure 2-9), most of the coarse-grained sediments do not appear to be continuous across the area. There does appear to be a fine-grained zone that is continuous at a depth of approximately -50 to -100 ft mean sea level (msl). The four Area C extraction wells are screened below this zone. The locations of both profiles are shown in Figure 2-7.

To evaluate the effectiveness of an extraction system, pumping induced horizontal and vertical gradients can be used. To determine horizontal gradients, several pairs of monitoring wells are needed which are screened in the same monitoring zone, located radially outward from the extraction wells. To evaluate the effect of the extraction system on vertical gradients, several pairs of wells are needed which are directly adjacent to each other, but screened in different monitoring zones.

The number and locations of monitoring wells in Area C do not currently allow an evaluation of the extraction system effectiveness. The evaluation of the Area C extraction system can only focus on the changes in hydraulic head in the area and long-term changes in water quality of nearby monitoring wells. The cone of depression created by the four wells, as currently operated, cannot be defined because there are only two pairs of wells from which horizontal gradients can be calculated and none of the wells are screened in the same zone as the extraction wells. Additional wells located radially outward from each extraction well are needed to define the induced gradients in each of the monitoring zones. Vertical gradients presently can only be determined at two well clusters. Thus, the effect of pumping from one monitoring zone on another monitoring zone cannot be determined, except at these two well clusters. A number of piezometers have been identified for installation as part of the Preliminary Groundwater Operable Unit Remedial Investigation (PGOURI) (Radian, September 1989). These will aid in determining the Area C extraction system zone of capture and in calculating vertical and horizontal gradients.

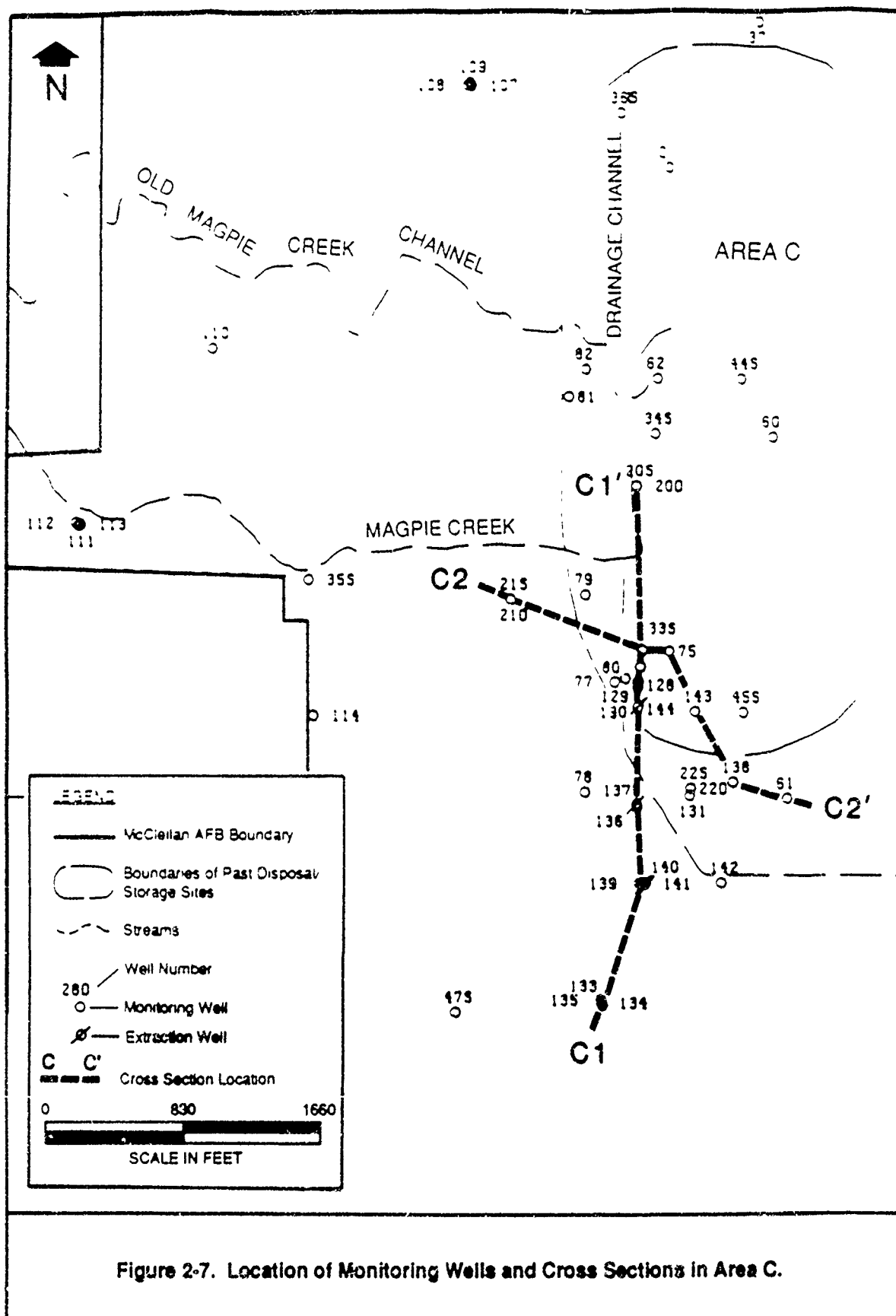
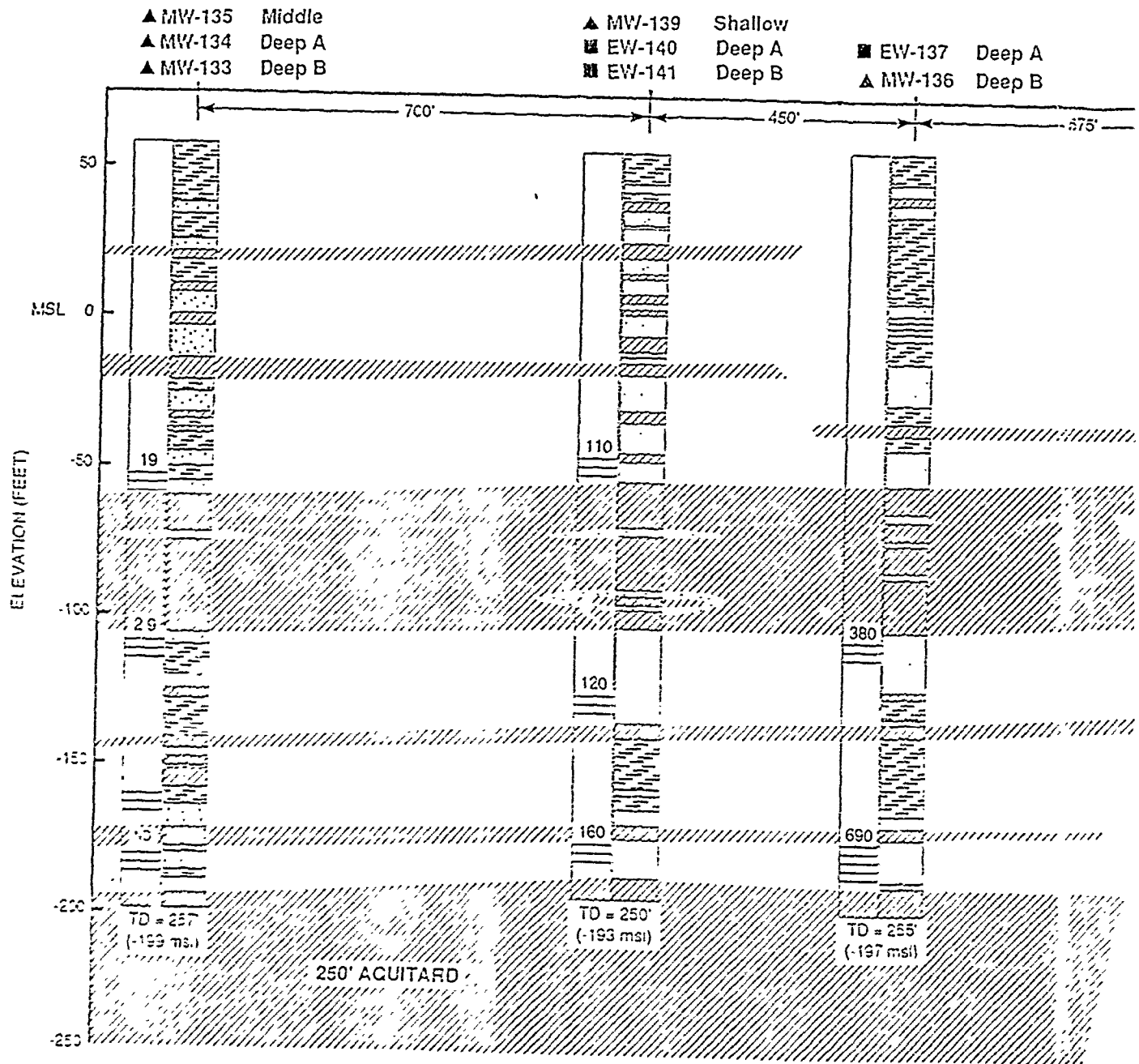


Figure 2-7. Location of Monitoring Wells and Cross Sections in Area C.

SOUTH  
C1



NORTH  
C1'

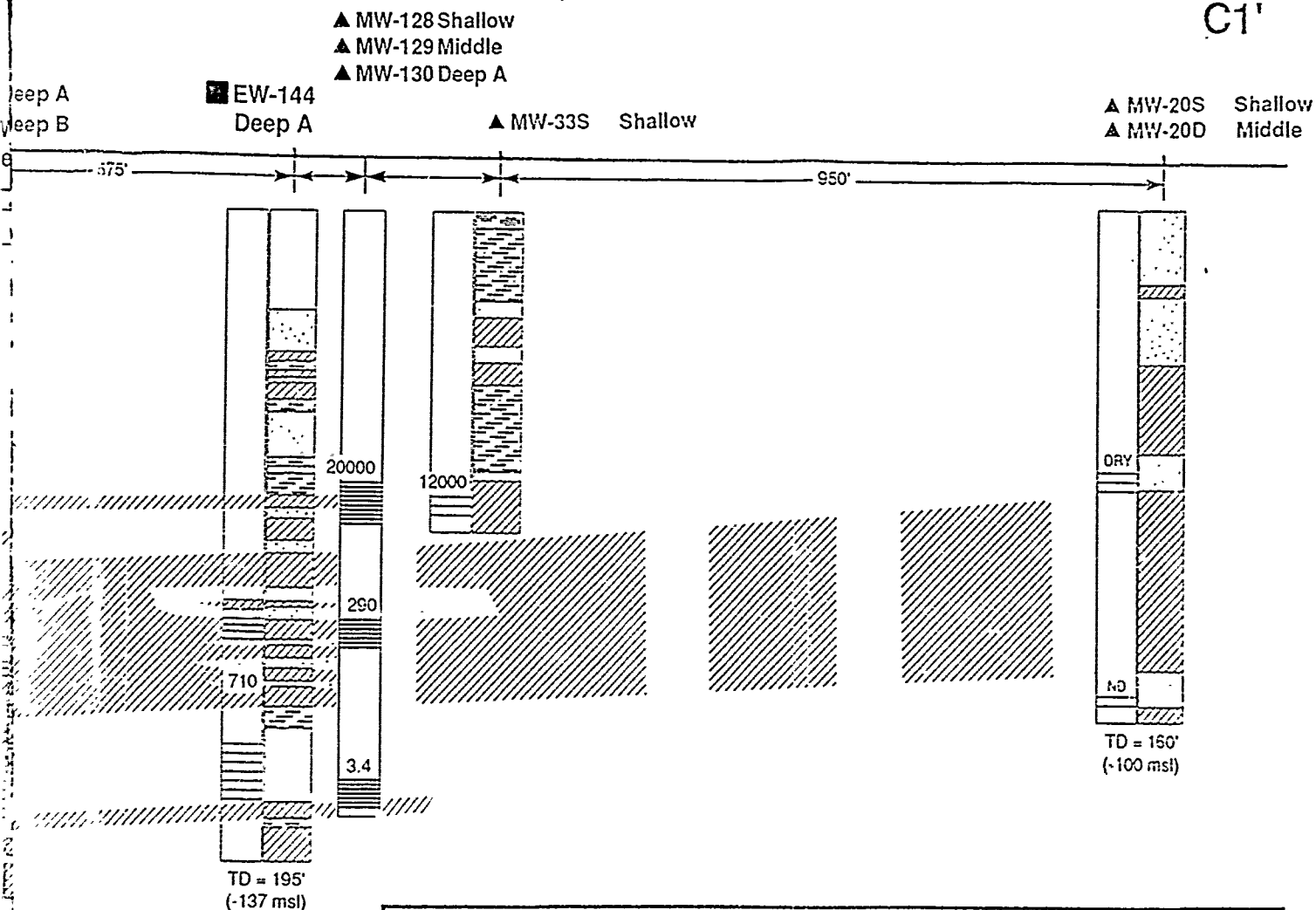
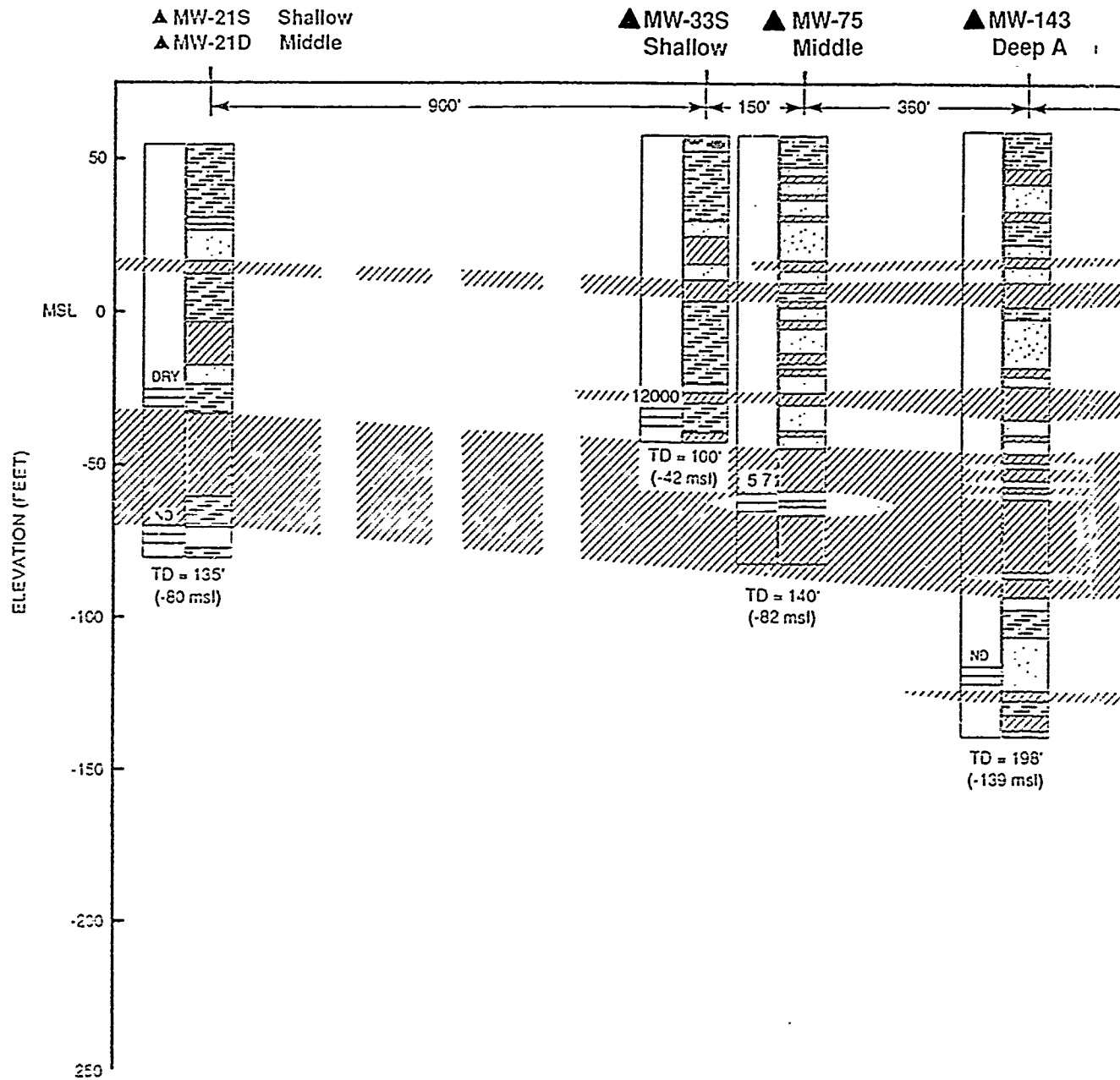


Figure 2-8.  
Subsurface Profile Area C:  
Depositional Dip Section (C1 - C1').

NW

C2



SE  
C2'

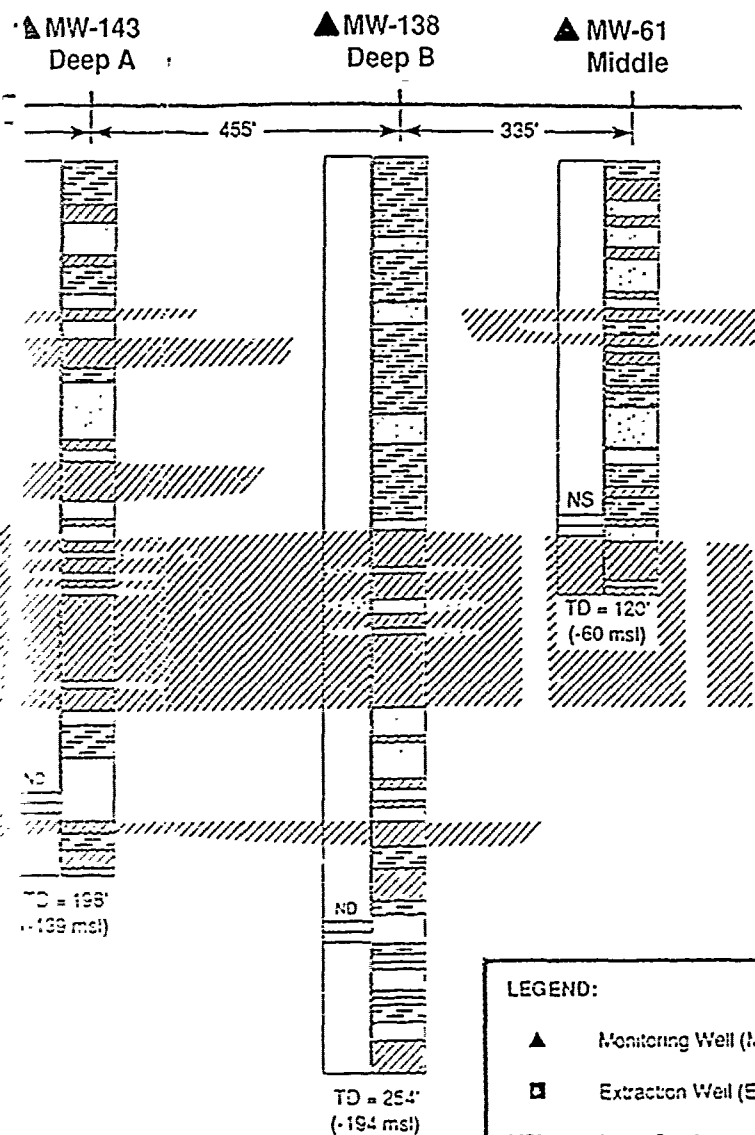


Figure 2-9.  
Subsurface Profile Area C:  
Depositional Strike Section (C2 - C2').



### Groundwater-Level Data

Groundwater-level data in Area C wells measured in October 1989 were used to generate potentiometric maps. The potentiometric maps for the shallow, middle, and deep "A" monitoring zones in Area C (Plates 2, 4, and 5) show a slight effect from the extraction system. There is a limited number of monitoring wells placed near enough to the extraction wells to delineate the cone of depression created by the extraction wells.

Horizontal gradients were calculated from groundwater-level data from two pairs of monitoring wells screened in the same monitoring zone (Table 2-2). MW-136 and MW-138 are located 16 feet and 580 feet east of EW-137, respectively. The two monitoring wells are screened in the deep "B" monitoring zone, and EW-137 is screened in the deep "A" monitoring zone. MW-128 and MW-33S are located 122 feet and 318 feet north of EW-144, respectively. The two monitoring wells are screened in the shallow monitoring zone, and EW-144 is screened in both the middle and deep "A" monitoring zones. The horizontal gradients between the two well pairs indicate a slight flow potential towards EW-137 and EW-144.

Vertical gradients were calculated at two monitoring well clusters, MW-128/MW-129/MW-130 and MW-134/MW-135 (Table 2-2). MW-128 is screened in the shallow monitoring zone; MW-129 and MW-135 are screened in the middle monitoring zone; and MW-130 and MW-134 are screened in the deep monitoring zone. The calculated vertical gradients for the two well pairs near EW-144 indicate a downward flow potential from the shallow to middle monitoring zone and from the middle to the deep zone. The vertical gradient at well cluster MW-135/MW-134 indicates an upward flow potential from the middle monitoring zone to the deep "A" monitoring zone. No well clusters are located near the other three extraction wells; therefore, the same type of flow potential assessment cannot be conducted for EW-137, EW-140, and EW-141.

The limited information from the calculated horizontal and vertical gradients does not provide enough data to determine the effect of the extraction system on the local groundwater flow patterns. The horizontal gradients calculated for the shallow and deep "B" monitoring zones indicate that there is a slight flow potential toward EW-144.

TABLE 2-2. HEAD DIFFERENCES AND GRADIENTS OF SELECTED WELL PAIRS IN  
AREA C, JANUARY THROUGH MARCH 1990

Well Pair	Monitoring Zone	Head Difference (feet)	Gradient (feet/foot)
<u>Horizontal*</u>			
MW-128 & MW-33S	Shallow	-0.35	-0.002
MW-136 & MW-138	Deep "B"	-1.07	-0.002
<u>Vertical</u>			
MW-128/MW-129	Shallow/Middle	-0.41	-0.011
MW-129/MW-130	Middle/Deep "A"	-1.48	-0.029
MW-135/MW-134	Middle/Deep "A"	1.01	0.018

\* The first well of the well pair is located closest to the extraction well.

NOTE: Negative head difference indicates flow potential toward extraction well or downward flow potential.

There is also a slight flow potential toward EW-137. Without additional wells in the three other monitoring zones, the influence of the four extraction wells on the groundwater flow pattern in these monitoring zones cannot be determined.

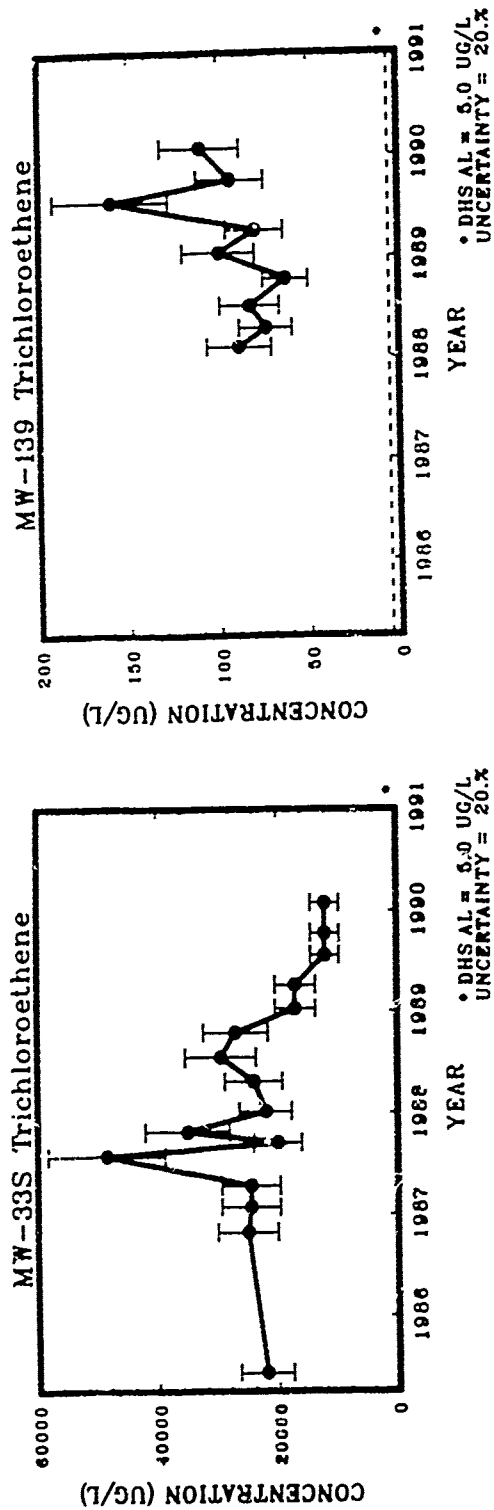
### Analytical Data

Analytical data for seven monitoring wells located near the Area C extraction system are presented on time series plots. The extraction system has been in operation for 19 months (August 1988 to March 1990); therefore, there are limited analytical data to evaluate long-term effects on contaminant concentrations. As additional analytical data are added to the plots, they will be evaluated to determine if there is an effect on water quality by the extraction system. Trichloroethene concentrations were plotted from two shallow-zone monitoring wells, two middle-zone monitoring wells, and three deep-zone monitoring wells. Trichloroethene was chosen as an indicator compound because it is the most widely detected compound in the McClellan AFB groundwater monitoring wells.

Time series plots for six Area C wells are depicted in Figures 2-10, 2-11, and 2-12. Figure 2-10 presents time series plots for two shallow zone monitoring wells, MW-139 and MW-33S. These two monitoring wells are located north and south of the extraction wells and contain TCE at concentrations exceeding MCLs. Time series plots for middle zone monitoring wells MW-129 and MW-135, are shown in Figure 2-11. MW-129 is located north of the extraction wells, and MW-135 is located south of the extraction wells. Both contain TCE concentrations above the MCL. Time series plots for two deep "A" zone monitoring wells, MW-130 and MW-134, are shown in Figure 2-12. MW-130 is located north of the extraction wells and MW-134 is located south of the extraction wells; detected TCE concentrations remain below MCLs in both wells.

The time series plots for the six wells all show fluctuating patterns. The TCE concentration patterns on the time series plots will continue to be reviewed to qualitatively assess whether the extraction wells are preventing the migration of contaminants away from Area C. Time series plots from additional wells in Area C may be added if specific patterns become apparent. The TCE concentrations in monitoring wells south of the extraction system should become stable or decrease over time if the extraction wells are preventing migration of contaminants away from Area C. The TCE

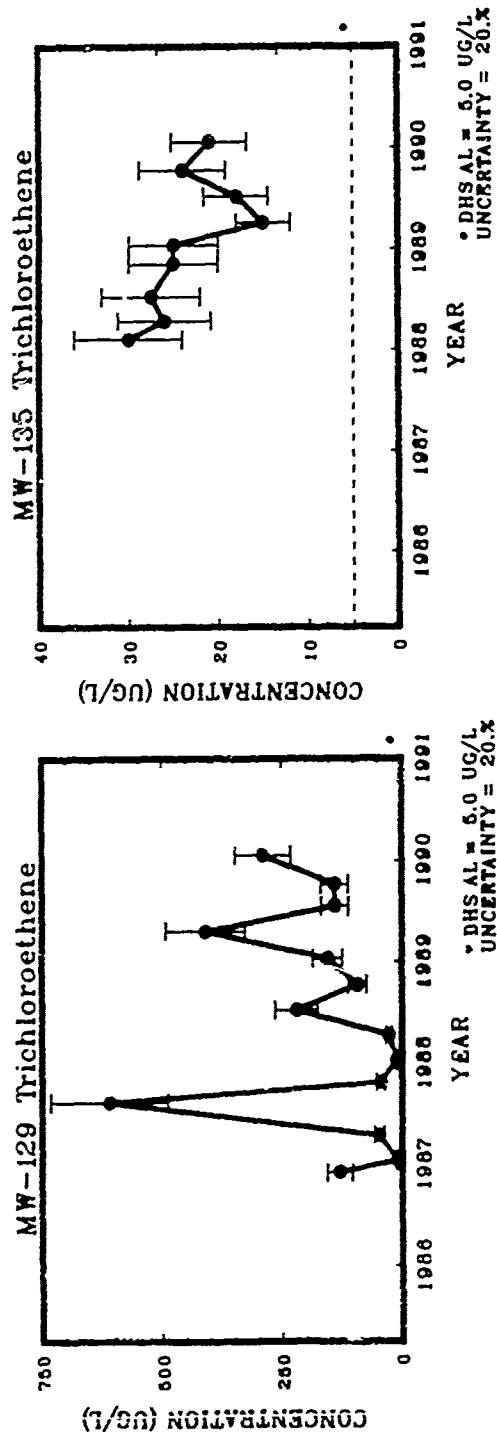
## AREA C SHALLOW ZONE WELLS



Note: 95% Confidence intervals are shown for concentrations for each data point to indicate the uncertainty in concentration values (in percent) for that analyte.

Figure 2-10. Time Series Plots for Selected Shallow Zone Monitoring Wells in Area C.

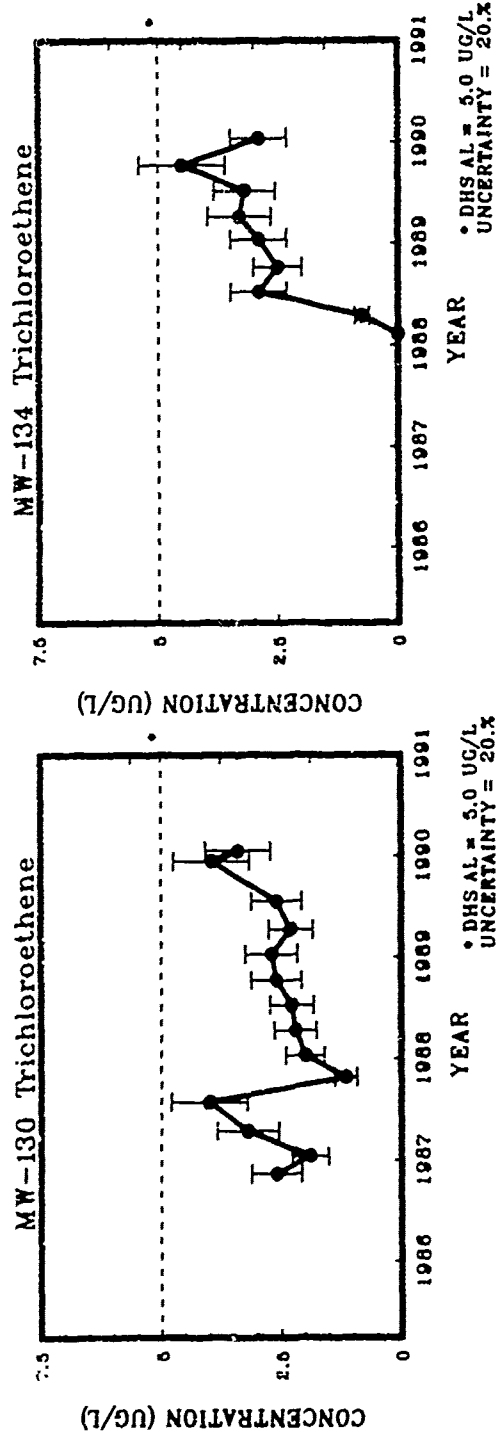
## AREA C MIDDLE ZONE WELLS



Note: 95% Confidence intervals are shown for concentrations for each data point to indicate the uncertainty in concentration values (in percent) for that analyte.

Figure 2-11. Time Series Plots for Selected Middle Zone Monitoring Wells in Area C.

## AREA C DEEP ZONE WELLS



Note: 95% Confidence intervals are shown for concentrations for each data point to indicate the uncertainty in concentration values (in percent) for that analyte.

Figure 2-12. Time Series Plots for Selected Deep Zone Monitoring Wells in Area C.

levels near extraction wells should remain detectable and show some fluctuation with time, as the extraction wells draw contaminated groundwater past the monitoring wells.

### **Conclusions**

The Area C extraction system was designed as an ERA to remove contaminated groundwater near a contaminant source. Additional work planned in the McClellan AFB RI/FS includes installing piezometers and additional monitoring wells and evaluating the need to construct additional extraction wells in Area C to control and remove contaminated groundwater. However, at the present time, the influence of the Area C extraction system cannot be evaluated using the existing array of monitoring wells. More well pairs are needed to determine the effect of the extraction wells on the hydraulic gradients and on local groundwater flow patterns. The extraction system has been operating for 19 months which does not appear to be a sufficient length of time for the extraction of groundwater to bring about notable changes in contaminant concentrations in existing wells. Trichloroethene concentration trends at monitoring wells located upgradient and downgradient of the extraction wells will continue to be evaluated to determine if contaminants migrating toward the extraction wells are being captured.

### 3.0 RECOMMENDATIONS

Based on field results and analytical data collected during the First Quarter 1990, the following recommendations are presented in Section 3.1. Section 3.2 presents the status of the recommendations made in the previous (October through December 1989) Data Summary.

#### 3.1 Current Recommendations

A complete evaluation of the Groundwater Sampling and Analysis Program (GSAP) was performed in December 1989 and reported in the "Letter of Recommendations for the Continuance of the Groundwater Sampling and Analysis Program" (Radian, 1990). The report provides the rationale for proposed revisions to the program, including changes in sampling frequencies, analytical methods, and sampling schedules. Current recommendations for the GSAP are contained in the Letter of Recommendations. The recommendations will become effective in the Second Quarter (April - June 1990) sampling effort.

MW-1054, MW-1055, and MW-1057 could not be sampled during the First Quarter sampling period due to muddy conditions at the site. Two attempts were made to sample these wells. These three wells are scheduled for sampling during Second Quarter 1990. Radian recommends that alternatives be explored to allow access to these wells during the wet season.

#### 3.2 Status of Previous Recommendations

The following is a brief status report of the recommendations made in previous reports.

- (1) Recommendation: Replace MW-122 with MW-119 for future sampling activities. This well has a bent casing and a malfunctioning dedicated pump system.

Status: The feasibility of using MW-119 is currently under investigation. Shortly, tests will be performed to determine if MW-119 will accept monitoring equipment. If so, the redevelopment of MW-119 will be recommended.



- (2) Recommendation: Replace MW-120 with MW-117 for future sampling activities. This well has a bent casing, and was dry during Fourth Quarter 1989.

Status: The feasibility of using MW-117 is currently under investigation. Tests will be performed and redevelopment of MW-117 will be recommended if monitoring equipment can be installed.

- (3) Recommendation: Sampling of MW-114, MW-1013, and MW-1014 should be attempted during the October through December 1989 sampling effort. These wells were very muddy and almost dry during Third Quarter 1989, and a representative sample could not be taken.

Status: Sampling of the wells was attempted during Fourth Quarter 1989 and First Quarter 1990 and they were still dry. Sampling will be attempted one more time before the wells are considered permanently dry and well abandonment recommended.

REFERENCES

McLaren Environmental Engineering, March 1987. "Area D Monitoring/Extraction System Technical Report No. 4 and Monitoring Plan and Operation and Maintenance Manual." McClellan AFB, CA, 1987.

Radian Corporation, October 1988. "Hydrogeologic Assessment Work Plan," Installation Restoration Program, Stage 3, McClellan AFB, CA.

Radian Corporation, March 1990. "Data Summary, October through December, 1989." Installation Restoration Program, Stage 3, McClellan AFB, CA.

Radian Corporation, September 1989. "Preliminary Groundwater Operable Unit Remedial Investigation," Installation Restoration Program, Stage 3, McClellan AFB, CA.

Radian Corporation, May 1990. "Quality Assurance Project Plan," Installation Restoration Program, Stage 3, McClellan AFB, CA.

Radian Corporation, November 1989. "Annual Technical Report (January - December 1988)," Installation Restoration Program, Stage 3, McClellan AFB, CA.

Radian Corporation, March 1990. "Letter of Recommendations for the Continuance of the Groundwater Sampling and Analysis Program," Installation Restoration Program, Stage 3, McClellan AFB, CA.

U.S. Environmental Protection Agency, November, 1986. "Test Methods for Evaluating Solid Waste, Third Edition." Office of Solid Waste and Emergency Response. Washington, D.C. 20460.

APPENDIX A1

## APPENDIX A-1. MONITORING WELLS SAMPLED ANNUALLY

Well Number	Area	Rationale
<u>ON-BASE MONITORING WELLS:</u>		
MW-17D	Other	a,b,c
MW-18D	Other	a,c
MW-27D	A	a,b
MW-29D	Other	a,b,c
MW-36S	C	a,b
MW-67	A	a,b,c
MW-68	A	a,b,c
MW-69	A	a,b,c
MW-100	Other	a,c
MW-101	Other	a,c
MW-102	Other	a,b,c
MW-103	Other	a,b,c
MW-106	Other	a,b,c
MW-107	C	a,b,c
MW-108	C	a,b,c
MW-109	C	a,b,c
MW-110	C	a,b,c
MW-111	C	a,b
MW-112	C	a,b,c
MW-113	C	a,b,c
MW-116	Other	a,b
<u>OFF-BASE MONITORING WELLS:</u>		
MW-1009	Northwest	a,b,c,d
MW-1010	Northwest	a,b,c,d
MW-1011	Southwest	a,b,c,d
MW-1012	Northeast	a,c
MW-1017	West	a,b,c,d
MW-1018	West	a,b,d
MW-1026	Northwest	a,b,c,d
MW-1027	Northwest	a,b,c,d
MW-1028	Northwest	a,b,c,d
MW-1029	Northwest	a,b,d
MW-1030	Northwest	a,b,c,d
MW-1031	Northwest	a,b,c,d
MW-1032	West	a,b,c,d
MW-1033	West	a, ,c,d
MW-1034	West	a,b,c,d

(Continued)

## APPENDIX A-1. (Continued)

Well Number	Area	Rationale
<u>OFF-BASE MONITORING WELLS:</u>		
MW-1035	West	a,b,c,d
MW-1036	West	a,b,d
MW-1040	Northeast	a,b,c,d
MW-1041	Northwest	a,b,c,d
MW-1042	Northwest	a,b,c,d
MW-1043	Northwest	a,b,c,d

- <sup>a</sup> Well is not currently used to evaluate the effectiveness of the Area C or Area D extraction system.
- <sup>b</sup> Well is not located within 1,000 feet of an active water supply well.
- <sup>c</sup> Well has consistently not contained detectable concentrations of contaminants or has never contained detectable concentrations of contaminants.
- <sup>d</sup> Well is located upgradient within the interim remedial measure area.

APPENDIX A2

APPENDIX A-2 ANALYTICAL RESULTS FOR NETWORK MONITORING WELLS IN WHICH CONCENTRATIONS OF ANALYTES HAVE EXCEEDED STATE AND FEDERAL DRINKING WATER STANDARDS FROM 1985 TO MARCH 1990, GROUNDWATER SAMPLING AND ANALYSIS PROGRAM, MOBILE/AN AIR FORCE BASE

Analyte Name	Maximum Contaminant Level	Round 1	Round 2	Round 3	4th Qtr. 1986	1st Qtr. 1987	2nd Qtr. 1987	3rd Qtr. 1987	4th Qtr. 1987	1st Qtr. 1988	2nd Qtr. 1988	3rd Qtr. 1988	4th Qtr. 1988	1st Qtr. 1989	2nd Qtr. 1989	3rd Qtr. 1989	4th Qtr. 1989	1st Qtr. 1990
Well Number	Or Action Level	6/85	11-12/85	2-4/86	9-12/86	1-3/87	4-6/87	7-9/87	9-12/87	1-3/88	4-6/88	7-9/88	10-12/88	1-3/89	4-6/89	7-9/89	10-12/89	1-3/90
Carbon Tetrachloride by 8010																		
M4-26D	0.5 (CL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.32 C	0.38 C	NS	0.62 C	NS
M4-27D	0.5 (CL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	8.7 P	NS	7.3 C	4.3 C	NS
1,2-Dichloroethane by 8010																		
M4-7	0.5 (CL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.50 C	1.3 C	NS
M4-10	0.5 (CL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	270. C	320. C	280. P	7000. P	250. C
M4-14	0.5 (CL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	34. C	NS	NS	NS
M4-15	0.5 (CL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5.9 C	NS	NS	NS
M4-27D	0.5 (CL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.50 P	NS	NS	NS	NS
M4-33S	0.5 (CL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	400. P	200. P	NS	NS	NS
M4-55	0.5 (CL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1.5 P	NS	NS	0.31 C	0.11 C
M4-57	0.5 (CL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.73 (c)
M4-63	0.5 (CL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1.3 C	1.0 P	1.3 C	1.2 C
M4-72	0.5 (CL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	80 C	130 P	110. P	120 C	140. C
M4-131	0.5 (CL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.82 P	NS	NS	NS
M4-132	0.5 (CL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.79 P	1.2 C	3.0 P	0.75 C	2.0 C
M4-135	0.5 (CL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.39 P	0.45 C	0.30 P	0.24 P	2.5 C
M4-139	0.5 (CL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1.9 C	NS	1.7 C	1.7 C
M4-1004	0.5 (CL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.20 C	0.22 P	NS	NS	0.67 (c)
M4-1005	0.5 (CL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.64 C	1.0 C	NS	0.32 C
M4-1046	0.5 (CL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.18 C	0.60 (b)
1,1-Dichloroethane by 8010																		
M4-10	6 (CL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1000. C	900 C	450. C	590. P	350. C
M4-11	6 (CL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	19000 C	14000. P	17000. C	20000. C
M4-12	6 (CL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	4000. P	2600. P	8800 C	7800. C	21000. C
M4-14	6 (CL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	4400. C	4600. C	2900. C	2300. C	1800 C
M4-15	6 (CL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	850 C	580. C	230 C	520. P	860. C
M4-44S	6 (CL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5.6 C	4.7 P	2.9 P	6.0 C	4.4 C
M4-55	6 (CL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	61. P	4.1 P	4.6 P	8.6 C	14. C
M4-72	6 (CL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	4400. C	370. P	280. P	280. C	530. P
M4-74	6 (CL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	12. P	NS	0.96 P	10. C	12. C
M4-76	6 (CL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	39 P	NS	9.9 P	1.6 C	9.8 CI
M4-89	6 (CL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	2.5 C	6.2 C	9.4 C	13. C	14. (29)P
M4-91	6 (CL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.74 C	3.2 C	1.2 C	4.0 P	8.8 C
M4-139	6 (CL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	11. P	NS	NS
M4-1004	6 (CL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	14 C	7.0 P	3.6 C	5.3 P	4.2 P
M4-1005	6 (CL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	33. P	21. C	15. C	3.9 P	11. C
Total 1,2-Dichloroethane by 8010																		
M4-7	16 (AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	23 C	20. C	27. C
M4-10	16 (AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	210 C	170. C	79. C	78 P	83. C

(Continued.)

ALL UNITS ARE ug/l  
M4 = Monitoring Well  
B = Detected in blank, result not corrected  
NA = Not analyzed  
NC = Result not confirmed in second column analysis  
AL = DHS Action Level  
S = Determined by Method of Standard Addition  
NE = Threshold value not established  
DL = Diluted out of the confirmation run  
RWL = US EPA Primary Maximum Contaminant Level  
C = Confirmed on second column  
NS = Not sampled  
ML = DHS Maximum Contaminant Level  
ND = Not detected at specified Detection Limit  
P = Previously confirmed column

APPENDIX A-2 (Continued)

Analyte Name	Max. amt. Contaminant Level Or Action Level	Round 1 11-12/85	Round 2 2-4/86	Round 3 9-12/86	1st Qtr. 1-3/87	2nd Qtr. 4-6/87	3rd Qtr. 7-9/87	4th Qtr. 9-12/87	1st Qtr. 1-3/88	2nd Qtr. 4-6/88	3rd Qtr. 7-9/88	4th Qtr. 10-12/88	1st Qtr. 1-3/89	2nd Qtr. 4-6/89	3rd Qtr. 7-9/89	4th Qtr. 10-12/89	1st Qtr. 1-3/90
M4-11	10	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-20	16	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-35	15	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-55	16	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-65	16	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-72	16	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-123	16	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-124	16	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-132	16	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-134	16	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-154	16	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-157	16	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Vinyl Chloride by 8010	0.5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-70	0.5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,1,2,2-tetrachloroethane by 8010	1	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-128	1	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-129	1	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,1,2-Trichloroethane by 8010	5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-2	5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-415	5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-75	5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-135	5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-150	5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-151	5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-153	5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-157	5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,1,1-Trichloroethane by 8010	5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-13	200	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-14	200	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-15	200	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,1,2-Trichloroethane by 8010	32	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-132	32	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Trichloroethane by 8010	5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-7	5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-10	5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-11	5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-12	5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

ALL UNITS ARE ug/l  
M4 = Monitoring Well  
B = Detected in blank, result not connected  
NA = Not analyzed  
NC = Result not confirmed in second column analysis  
AL = IHS Action Level  
S = Determined by Method of Standard Addition  
NS = Threshold value not established  
NS = Result not confirmed in second column analysis  
IL = Diluted out of the confirmation run  
MCL = US EPA Primary Maximum Contaminant Level  
MCL = IHS Maximum Contaminant Level  
ND = Not detected at specified Detection Limit  
P = Previously confirmed column  
(Correlated.)



## APPENDIX A-2 (Continued)

Analyte Name	Maximum Concentration Level Or Action Level	Round 1 1985 6/85	Round 2 1985 11-12/85	Round 3 1986 2-4/86	1st Qtr. 1987 1-3/87	2nd Qtr. 1987 4-6/87	3rd Qtr. 1987 7-9/87	4th Qtr. 1987 9-12/87	1st Qtr. 1988 1-3/88	2nd Qtr. 1988 4-6/88	3rd Qtr. 1988 7-9/88	4th Qtr. 1988 10-12/88	1st Qtr. 1989 1-3/89	2nd Qtr. 1989 4-6/89	3rd Qtr. 1989 7-9/89	4th Qtr. 1989 10-12/89	1st Qtr. 1990 1-3/90
M4-14	5	0.1L	NS	NS	NS	NS	NS	NS	NS	NS	NS	3800. P	4100. C	1500. P	1400. C	2400. C	1900. C
M4-15	5	0.1L	NS	NS	NS	NS	NS	NS	NS	NS	NS	570. C	340. C	140. C	310. P	630. C	320. C
M4-20D	5	0.1L	NS	NS	NS	NS	NS	NS	NS	NS	NS	8.1 C	22. C	22. C	34. P	50. C	50. C
M4-27D	5	0.1L	NS	NS	NS	NS	NS	NS	NS	NS	NS	67. P	NS	NS	87. C	150. C	NS
M4-33S	5	0.1L	NS	NS	NS	NS	NS	NS	NS	NS	NS	27000. P	17000. P	12000. P	12000. P	12000. P	12000. C
M4-41S	5	0.1L	NS	NS	NS	NS	NS	NS	NS	NS	NS	2900. P	3400. C	2700. C	2500. C	3500. C	1800. C
M4-44S	5	0.1L	NS	NS	NS	NS	NS	NS	NS	NS	NS	2.2 C	1.1 P	0.73 P	1.3 C	2.2 C	22. (b)
M4-55	5	0.1L	NS	NS	NS	NS	NS	NS	NS	NS	NS	14. P	1.4 P	1.5 P	3.2 C	2.9 C	1.8 C
M4-61	5	0.1L	NS	NS	NS	NS	NS	NS	NS	NS	NS	14. C	14. C	7.6 C	9.8 P	13. P	NS
M4-63	5	0.1L	NS	NS	NS	NS	NS	NS	NS	NS	NS	58. P	59. C	76. P	35. C	110. C	110. C
M4-65	5	0.1L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	58. C	95. C	110. P	95. CI
M4-72	5	0.1L	NS	NS	NS	NS	NS	NS	NS	NS	NS	660. C	550. P	580. P	530. C	790. C	700. C
M4-74	5	0.1L	NS	NS	NS	NS	NS	NS	NS	NS	NS	5.4 P	NS	NS	5.5 C	7.1 C	4.8 CI
M4-75	5	0.1L	NS	NS	NS	NS	NS	NS	NS	NS	NS	20. C	12. C	17. C	23. C	38. C	5.7 C
M4-91	5	0.1L	NS	NS	NS	NS	NS	NS	NS	NS	NS	3.8 C	4.9 C	3.0 C	3.8 P	5.9 C	5.4 C
M4-120	5	0.1L	NS	NS	NS	NS	NS	NS	NS	NS	NS	6.2 C	5.1 C	4.5 C	ND	NS	NS
M4-128	5	0.1L	NS	NS	NS	NS	NS	NS	NS	NS	NS	22000. C	17000. C	12000. P	26000. P	18000. P	21000. C
M4-129	5	0.1L	NS	NS	NS	NS	NS	NS	NS	NS	NS	93. C	170. C	410. P	140. P	290. P	NS
M4-131	5	0.1L	NS	NS	NS	NS	NS	NS	NS	NS	NS	72. P	90. P	97. P	27. C	NS	49. C
M4-132	5	0.1L	NS	NS	NS	NS	NS	NS	NS	NS	NS	95. P	90. C	75. P	ND	90. C	130. C
M4-135	5	0.1L	NS	NS	NS	NS	NS	NS	NS	NS	NS	25. P	25. C	15. P	19. P	24. P	23. C
M4-136	5	0.1L	NS	NS	NS	NS	NS	NS	NS	NS	NS	360. P	220. C	390. C	130. P	170. C	690. C
M4-139	5	0.1L	NS	NS	NS	NS	NS	NS	NS	NS	NS	63. P	100. C	80. P	160. C	95. C	110. C
M4-148	5	0.1L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	6.0 C	6.8 C	7.2 C
M4-153	5	0.1L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	10. C	52. C
M4-156	5	0.1L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	100. IC
M4-157	5	0.1L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5400. C
M4-158	5	0.1L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1500. C
M4-100S	5	0.1L	NS	NS	NS	NS	NS	NS	NS	NS	NS	11. P	5.2 C	3.6 C	0.80 P	3.0 C	3.1 C
M4-1021	5	0.1L	NS	NS	NS	NS	NS	NS	NS	NS	NS	11. C	15. C	9.3 C	14. P	15. C	13. P
M4-1022	5	0.1L	NS	NS	NS	NS	NS	NS	NS	NS	NS	10. C	10. C	5.2 P	8.8 P	5.7 P	5.9 C
M4-1045	5	0.1L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	2.3 C	5.8 C
M4-1046	5	0.1L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	18. C	20. C
M4-1049	5	0.1L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	7.5 C	8.5 P
Carbon Tetrachloride by 8240																	
M4-27D	0.5	0.1L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	6.1	NS
Trichloroethylene by 8240																	
M4-7	5	0.1L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-27D	5	0.1L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-8	5	0.1L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

(Continued.)

ALL UNITS ARE ug/l  
 M4 = Monitoring Well  
 B = Detected in blank, result not corrected  
 NA = Not analyzed  
 NC = Result not confirmed in second column analysis  
 AL = DES Action Level  
 S = Determined by Method of Standard Addition  
 NE = Threshold value not established  
 DL = Diluted out of the confirmation run  
 PMCL = US EPA Primary Maximum Contaminant Level  
 C = Confirmed on second column  
 NS = Not sampled  
 MCL = IHS Maximum Contaminant Level  
 ND = Not detected at specified Detection Limit  
 P = Previously confirmed column

APPENDIX A-2 (Continued)

Analyte Name	Maximum Concentration Level, Or Action Level	Board 1 1985 6/85	Board 2 1985 11-12/85	Board 3 1986 2-4/86	4th Qtr. 1986 9-12/86	1st Qtr. 1987 1-3/87	2nd Qtr. 1987 4-6/87	3rd Qtr. 1987 7-9/87	4th Qtr. 1987 9-12/87	1st Qtr. 1988 1-3/88	2nd Qtr. 1988 4-6/88	3rd Qtr. 1988 7-9/88	4th Qtr. 1988 10-12/88	1st Qtr. 1989 1-3/89	2nd Qtr. 1989 4-6/89	3rd Qtr. 1989 7-9/89	4th Qtr. 1989 10-12/89	1st Qtr. 1990 1-3/90
M4-1046	5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-1049	5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Aluminum by 6010																		
M4-10	1000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	4300.
Cadmium by 6010																		
M4-139	10	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-44S	50	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Selenium by 6010																		
M4-220	10	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-120	10	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-129	10	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Silver by E200.7																		
M4-1005	50	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Barium by E200.7																		
M4-36S	1000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Cadmium by E200.7																		
M4-33S	10	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-36S	10	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-128	10	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Quantum by E200.7																		
M4-12	50	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-31S	50	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-44S	50	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-101	50	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-1018	50	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-1019	50	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Lead by E200.7																		
M4-12	50	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-1001	50	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-1012	50	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Mercury by E245.1																		
M4-44S	2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Carbon Tetrachloride by E601																		
M4-270	0.5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-33S	0.5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-41S	0.5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dichloroethane by E601																		
M4-10	0.5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-11	0.5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

(Continued)

ALL UNITS ARE  $\mu\text{g/l}$   
 M4 = Monitoring Well  
 B = Detected in blank, result not corrected  
 NS = Not analyzed  
 NC = Result not confirmed in second column analysis  
 EL = Diluted out of the confirmation run  
 A. = DFS Action Level  
 S = Determined by Method of Standard Addition  
 NS = Threshold value not established  
 PMCL = US. EPA Primary Maximum Contaminant Level  
 C = Confirmed on second column  
 NS = Not sampled  
 MCL = DFS Maximum Contaminant Level  
 ND = Not detected at specified Detection Limit  
 P = Previously confirmed column

## APPENDIX A-2 (Continued.)

Analyte Name	Maximum Concentration Level	Round 1	Round 2	Round 3	4th Qtr.	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	1st Qtr.
Well	Or Action Level	1985	1985	1985	1986	1987	1987	1987	1987	1988	1988	1988	1988	1989	1989	1989	1989	1990
Number		6/85	11-12/85	2-4/86	9-12/86	1-3/87	4-6/87	7-9/87	9-12/87	1-3/88	4-6/88	7-9/88	10-12/88	1-3/89	4-6/89	7-9/89	10-12/89	1-3/90
M4-14	0.5 (ACL)	2790.	NS	NS	NS	NS	NS	NS	NS	NS	36 C	ND	NS	NS	NS	NS	NS	NS
M4-15	0.5 (ACL)	ND	NS	NS	NS	NS	NS	NS	NS	NS	6.8 C	5.6 C	NS	NS	NS	NS	NS	NS
M4-27D	0.5 (ACL)	ND	NS	NS	NS	NS	NS	NS	NS	NS	0.98 FC	2.7 C	NS	NS	NS	NS	NS	NS
M4-33S	0.5 (ACL)	ND	NS	NS	NS	NS	NS	NS	NS	NS	400 C	530 C	NS	NS	NS	NS	NS	NS
M4-38D	0.5 (ACL)	300.	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-41S	0.5 (ACL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-54	0.5 (ACL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-55	0.5 (ACL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-63	0.5 (ACL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-72	0.5 (ACL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-76	0.5 (ACL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-117	0.5 (ACL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-128	0.5 (ACL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-131	0.5 (ACL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-132	0.5 (ACL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-135	0.5 (ACL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-139	0.5 (ACL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-1004	0.5 (ACL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-1005	0.5 (ACL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,4-Dichlorobenzene by E601																		
M4-33S	5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-54	5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-128	5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,1-Dichloroethene by E601																		
M4-10	6	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-11	6	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-12	6	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-14	6	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-15	6	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-22D	6	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-28D	6	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-38D	6	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-44S	6	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-53	6	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-54	6	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-55	6	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-57	6	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-59	6	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-72	6	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-74	6	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

(Continued.)

ALL UNITS ARE ug/l  
 M4 = Monitoring Well  
 S = Detected in blank, result not corrected  
 NA = Not analyzed  
 NC = Result not confirmed in second column analysis  
 AL = IIS Action Level  
 S = Determined by Method of Standard Addition  
 NS = Threshold value not established  
 NS = Diluted out of the confirmation run  
 PML = US, EPA Primary Maximum Contaminant Level  
 C = Confirmed on second column  
 NS = Not sampled  
 MCL = IIS Maximum Contaminant Level  
 ND = Not detected at specified Detection Limit  
 P = Previously confirmed column

## APPENDIX A-2. (Continued)

Analyte Name	Maximum Concentration Level	Round 1	Round 2	Round 3	4th Qtr.	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	1st Qtr.
Well Number	Or Action Level	1985 6/85	1985 11-12/85	1986 2-4/86	1986 9-12/86	1987 1-3/87	1987 4-6/87	1987 7-9/87	1987 9-12/87	1988 1-3/88	1988 4-6/88	1988 7-9/88	1988 10-12/88	1989 1-3/89	1989 4-6/89	1989 7-9/89	1989 10-12/89	1990 1-3/90				
M4-76	6 (MCL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	200 C	48 C	NS	NS	NS	NS	NS	NS	NS	NS	NS	
M4-91	6 (MCL)	NS	NS	NS	NS	14 C	14 C	8.1 C	3.3 C	1.3 C	0.65 FC	1.2 C	NS	NS	NS	NS	NS	NS	NS	NS	NS	
M4-130	6 (MCL)	NS	NS	NS	3.2 C	4.0 C	6.1 C	8.6 C	2.5 C	2.9 FC	2.7 FC	3.4 P	NS	NS	NS	NS	NS	NS	NS	NS	NS	
M4-1004	6 (MCL)	NS	NS	NS	100 C	62 C	160 C	130 C	41 C	23 FC	16 FC	12 C	NS	NS	NS	NS	NS	NS	NS	NS	NS	
M4-1005	6 (MCL)	NS	NS	NS	110 C	102 C	160 C	280 C	79 C	58 FC	38 FC	40 P	NS	NS	NS	NS	NS	NS	NS	NS	NS	
Total 1,2-Dichloroethane by ES01																						
M4-10	16 (AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	12 C	460 C	NS	NS	NS	NS	NS	NS	NS	NS	NS	
M4-11	16 (AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	51 C	NO	NS	NS	NS	NS	NS	NS	NS	NS	NS	
M4-14	16 (AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	27 C	NO	NS	NS	NS	NS	NS	NS	NS	NS	NS	
M4-27D	16 (AL)	NS	NS	NS	NS	NS	18 C	30 C	26 C	16 C	28 FC	34 P	NS	NS	NS	NS	NS	NS	NS	NS	NS	
M4-33S	16 (AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	460 C	540 C	NS	NS	NS	NS	NS	NS	NS	NS	NS	
M4-38D	16 (AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
M4-41S	16 (AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	22 FC	25 P	NS	NS	NS	NS	NS	NS	NS	NS	NS	
M4-54	16 (AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.78 C	7.0 C	NS	NS	NS	NS	NS	NS	NS	NS	NS	
M4-55	16 (AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	7.4 FC	28 P	NS	NS	NS	NS	NS	NS	NS	NS	NS	
M4-63	16 (AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	33 FC	46 P	NS	NS	NS	NS	NS	NS	NS	NS	NS	
M4-72	15 (AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	48 FC	80 P	NS	NS	NS	NS	NS	NS	NS	NS	NS	
M4-76	16 (AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	28 C	14 C	NS	NS	NS	NS	NS	NS	NS	NS	NS	
M4-120	16 (AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	17 FC	11 C	NS	NS	NS	NS	NS	NS	NS	NS	NS	
M4-128	16 (AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	530 C	340 C	NS	NS	NS	NS	NS	NS	NS	NS	NS	
M4-131	16 (AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	24 FC	21 P	NS	NS	NS	NS	NS	NS	NS	NS	NS	
M4-132	16 (AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	33 C	39 P	NS	NS	NS	NS	NS	NS	NS	NS	NS	
M4-139	16 (AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	16 FC	24 C	NS	NS	NS	NS	NS	NS	NS	NS	NS	
M4-1000	16 (AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NO	0.16 C	NS	NS	NS	NS	NS	NS	NS	NS	NS	
M4-1005	16 (AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	2.5 FC	4.8 P	NS	NS	NS	NS	NS	NS	NS	NS	NS	
1,2-Dichloropropane by ES01																						
M4-33S	5 (MCL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NO	NO	NS	NS	NS	NS	NS	NS	NS	NS	NS	
M4-128	5 (MCL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NO	NO	NS	NS	NS	NS	NS	NS	NS	NS	NS	
Trichlorofluoromethane by ES01																						
M4-36S	150 (AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	22 C	21 C	NS	NS	NS	NS	NS	NS	NS	NS	NS	
Vinyl Chloride by ES01																						
M4-10	0.5 (MCL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	400 C	360 C	NS	NS	NS	NS	NS	NS	NS	NS	NS	
M4-11	0.5 (MCL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	13 C	NO	NS	NS	NS	NS	NS	NS	NS	NS	NS	
M4-14	0.5 (MCL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	1.4 C	NO	NS	NS	NS	NS	NS	NS	NS	NS	NS	
M4-15	0.5 (MCL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	1.5 C	NO	NS	NS	NS	NS	NS	NS	NS	NS	NS	
M4-33S	0.5 (MCL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NO	NO	NS	NS	NS	NS	NS	NS	NS	NS	NS	
M4-36S	0.5 (MCL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NO	NO	NS	NS	NS	NS	NS	NS	NS	NS	NS	
M4-38D	0.5 (MCL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NO	NO	NS	NS	NS	NS	NS	NS	NS	NS	NS	
M4-54	0.5 (MCL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	5.0 C	2.9 C	NS	NS	NS	NS	NS	NS	NS	NS	NS	
M4-58	0.5 (MCL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NO	NO	NS	NS	NS	NS	NS	NS	NS	NS	NS	

(Continued.)

ALL UNITS ARE ug/l  
 M4 = Monitoring Well  
 B = Detected in blank, result not extracted  
 NA = Not analyzed  
 NC = Result not confirmed in second column analysis  
 AL = IHS Action Level  
 S = Determined by Method of Standard Addition  
 NS = Threshold value not established  
 NS = Result not confirmed in second column analysis  
 IL = Diluted out of the confirmation run  
 RML = US EPA Primary Maximum Contaminant Level  
 C = Confirmed on second column  
 NS = Not sampled  
 MCL = IHS Maximum Contaminant Level  
 NO = Not detected at specified Detection Limit  
 P = Previously confirmed column

## APPENDIX A-2 (Continued)

Analyte Name	Found 1	Found 2	Found 3	4th Qtr.	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	1st Qtr.
Well	1985	1986	1986	1987	1987	1987	1988	1988	1988	1989	1989	1989	1990
Number	6/85	11-12/85	2-4/86	9-12/86	1-3/87	4-6/87	7-9/87	10-12/87	1-3/88	4-6/88	7-9/88	10-12/88	1-3/89
M4-72	NS	NS	NS	NS	NS	41 C	NS	NS	NS	NS	NS	NS	NS
M4-76	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-128	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,1,2,2-Tetrachloroethane by E601													
M4-33S	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Tetrachloroethane by E601													
M4-10	65	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-11	2490	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-12	1260	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-14	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-22D	14	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-33S	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-39D	260	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-41S	3.3	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-55	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-128	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-1021	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,1,1-Trichloroethane by E601													
M4-10	327	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-11	12100	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-12	12400	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-14	2800	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-15	4100	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-33S	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-39D	1870	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,1,2-Trichloroethane by E601													
M4-39D	213	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-54	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Trichloroethane by E601													
M4-6	86	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-7	38	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-9	134	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-10	826	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-11	11900	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-12	12100	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-14	26600	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-15	18000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-19S	4.3	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-22D	213	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-29D	8.7	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

(Continued)

ALL UNITS ARE ug/l  
 M4 = Monitoring Well  
 B = Detected in blank, result not corrected  
 NA = Not analyzed  
 NS = Result not confirmed in second column analysis  
 DL = Diluted out of the confirmation run  
 AL = IHS Action Level  
 S = Determined by Method of Standard Addition  
 NE = Threshold value not established  
 NC = Result not confirmed in second column analysis  
 IMCL = US EPA Primary Maximum Contaminant Level  
 C = Confirmed on second column  
 NS = Not sampled  
 MCL = IHS Maximum Contaminant Level  
 ND = Not detected at specified Detection Limit  
 P = Previously confirmed column

APPENDIX A-2 (Continued)

Analyte Name	Maximum Contaminant Level Or Action Level	Round 1	Round 2	Round 3	4th Qtr.	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	1st Qtr.
Well Number		1985 6/85	1985 11-12/85	1986 2-4/86	9-12/86	1987 1-3/87	4-6/87	7-9/87	9-12/87	1988 1-3/88	4-6/88	7-9/88	10-12/88	1989 1-3/89
M4-265	5 (MCL)	21.	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-270	5 (MCL)	4.6	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-275	5 (MCL)	63.	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-280	5 (MCL)	8.9	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-335	5 (MCL)	22600.	NS	NS	25000. C	27000. C	25000 C	52000. C	35000. C	22000. C	24000. C	32000. C	NS	NS
M4-365	5 (MCL)	2.9	NS	1.8	2.2 NC	ND	3.7 C	5.3 C	1.8 C	1.9 C	2.6 C	2.5 C	NS	NS
M4-380	5 (MCL)	296.	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-405	5 (MCL)	190.	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-415	5 (MCL)	23.	NS	20	44. C	37. C	91. C	130 C	100 C	140. FC	220 FC	980. P	NS	NS
M4-54	5 (MCL)	NS	NS	NS	9.0 DL	3.9 C	ND	1.8 C	1.4 C	ND	7.3 C	NS	NS	NS
M4-55	5 (MCL)	NS	NS	NS	110. C	70. C	51. C	37. C	7.0 C	11 C	4.6 FC	19. P	NS	NS
M4-57	5 (MCL)	NS	NS	NS	2.5 C	14. C	ND	ND	0.58 C	2.3 C	ND	ND	NS	NS
M4-59	5 (MCL)	NS	NS	NS	290. C	108. C	40. C	13 C	6.2 C	2.3 FC	0.49 FC	ND	NS	NS
M4-61	5 (MCL)	NS	NS	NS	3.1	22. C	23. C	14 C	5.3 C	4.3 C	5.2 FC	7.9 P	NS	NS
M4-63	5 (MCL)	NS	NS	NS	40.	24 C	210 C	190. C	52 C	69. C	44. FC	91. P	NS	NS
M4-72	5 (MCL)	NS	NS	NS	NS	NS	410. C	1200 C	560. C	870 FC	1000. FC	960 P	NS	NS
M4-74	5 (MCL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	8.3 C	4.6 P	NS	NS
M4-75	5 (MCL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	17 C	26. C	NS	NS
M4-91	5 (MCL)	NS	NS	NS	NS	9.9 C	13. C	18 C	6.7 C	6.6 C	7.6 FC	6.9 C	NS	NS
M4-92	5 (MCL)	NS	NS	NS	NS	6.2 C	7.9 C	9.4 C	3.8 C	4.4 FC	4.1 C	3.8 C	NS	NS
M4-117	5 (MCL)	NS	NS	NS	21 C	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-120	5 (MCL)	NS	NS	NS	24.	20. C	19. C	25. C	26. C	9.3 C	8.8 C	12 FC	9.8 C	NS
M4-123	5 (MCL)	NS	NS	NS	3.1	7.1 C	NS	NS	NS	NS	NS	NS	NS	NS
M4-128	5 (MCL)	NS	NS	NS	NS	41000. C	28200 C	55000. C	68000. C	27000 C	19000 FC	27000 C	34000 C	NS
M4-129	5 (MCL)	NS	NS	NS	NS	130. C	10 C	48. C	610 C	45 C	11. C	27 C	220 C	NS
M4-131	5 (MCL)	NS	NS	NS	NS	29. C	19 C	30 C	120. C	55 C	32 C	52. FC	99. P	NS
M4-132	5 (MCL)	NS	NS	NS	NS	90. C	62. C	110. C	130	77. FC	48. C	93. P	NS	NS
M4-135	5 (MCL)	NS	NS	NS	NS	NS	NS	NS	NS	30. C	26 FC	27. C	NS	NS
M4-136	5 (MCL)	NS	NS	NS	NS	NS	NS	NS	NS	230. C	220. FC	470. C	NS	NS
M4-139	5 (MCL)	NS	NS	NS	NS	NS	NS	NS	NS	89 C	74. FC	83. C	NS	NS
M4-1004	5 (MCL)	NS	NS	NS	NS	26. C	18. C	27. C	24 C	7.2 C	3.6 FC	2.6 FC	2.2 C	NS
M4-1005	5 (MCL)	NS	NS	NS	NS	80. C	59. C	95. C	86. C	22 C	15. FC	12 FC	14. P	NS
M4-1021	5 (MCL)	NS	NS	NS	NS	57. C	32. C	57. C	46. C	17. C	11 FC	14 C	18. C	NS
M4-1022	5 (MCL)	NS	NS	NS	NS	13. C	ND	20. C	7.6 C	4.8 FC	12. FC	11. P	NS	NS
M4-1041	5 (MCL)	NS	NS	NS	NS	16. C	ND	ND	ND	ND	ND	ND	NS	NS
Chloroform by B501														
M4-14	100 (MCL)	2320.	NS	NS	NS	NS	NS	NS	NS	NS	12. C	ND	NS	NS
Benzene by B502														
M4-10	1 (MCL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	11 C	ND	NS	NS
M4-11	1 (MCL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	30 C	ND	NS	NS

(Continued)

ALL UNITS ARE ug/l  
M4 = Monitoring Well  
B = Detected in blank, result not corrected  
NA = Not analyzed  
NC = Result not confirmed in second column analysis  
AL = DHS Action Level  
S = Determined by Method of Standard Addition  
NE = Threshold value not established  
DL = Diluted out of the confirmation run  
MCL = DHS Maximum Contaminant Level  
ND = Not detected at specified Detection Limit  
P = Previously confirmed column

APPENDIX A-2 (Continued.)

Analyte Name	Medium	Round 1	Round 2	Round 3	4th Qtr.	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	1st Qtr.
Well	Contaminant Level	1985	1985	1986	1986	1987	1987	1988	1988	1989	1989	1989	1989	1990
Number	Or Action Level	6/85	11-12/85	2-4/86	9-12/86	1-3/87	4-6/87	7-9/87	10-12/87	1-3/88	4-6/88	7-9/88	10-12/88	1-3/89
M4-54	1	(AL)	NS	NS	9.5 C	NS	1.0 C	NS	NS	NS	NS	NS	NS	NS
M4-112	1	(AL)	NS	NS	2.2 NC	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-1021	1	(AL)	NS	NS	NS	NS	1.1 C	NS	NS	NS	NS	NS	NS	NS
1,4-Dichlorobenzene by E602														
M4-338	5	(AL)	NS	NS	4.2 C	5.8 C	7.2 DL	7.0 DL	NS	NS	NS	NS	NS	NS
Benzene by E624														
M4-54	1	(AL)	NS	NS	NS	NS	2.1 EL	NS	NS	NS	NS	NS	NS	NS
M4-102	1	(AL)	NS	NS	NS	NS	NS	5.2 EL	NS	NS	NS	NS	NS	NS
Carbon Tetrachloride by E624														
M4-270	0.5	(AL)	NS	NS	NS	NS	NS	NS	NS	7.1	NS	NS	NS	NS
1,2-Dichloroethene by E624														
M4-10	0.5	(AL)	NS	NS	NS	NS	NS	NS	330	NS	NS	NS	NS	NS
M4-11	0.5	(AL)	NS	NS	NS	NS	NS	NS	79	120	140	NS	NS	NS
M4-12	0.5	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-14	0.5	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-15	0.5	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-53	0.5	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-54	0.5	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-55	0.5	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-59	0.5	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-72	0.5	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-74	0.5	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-76	0.5	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-91	0.5	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-1004	0.5	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-1005	0.5	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Total 1,2-Dichloroethene by E624														
M4-10	16	(AL)	NS	NS	NS	NS	NS	NS	780	NS	NS	NS	NS	NS
M4-270	16	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-338	16	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-415	16	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-55	16	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-63	16	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-72	16	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-76	16	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-128	16	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

(Continued.)

ALL UNITS ARE ug/l  
M4 = Monitoring Well  
B = Detected in blank, result not corrected  
NA = Not analyzed  
NC = Result not confirmed in second column analysis DL = Diluted out of the confirmation run

AL = IHS Action Level  
S = Determined by Method of Standard Addition  
NS = Threshold value not established

MDL = US EPA Primary Maximum Contaminant Level  
C = Confirmed on second column  
NS = Not sampled

MDL = IHS Maximum Contaminant Level  
ND = Not Detected at specified Detection Limit  
P = Previously confirmed column

APPENDIX A-2 (Continued.)

Analyte Name	Maximum Concentration Level Or Action Level	Round 1 1985 6/85	Round 2 1985 11-12/85	Round 3 1986 2-4/86	4th Qtr. 1986 9-12/86	1st Qtr. 1987 1-3/87	2nd Qtr. 1987 4-6/87	3rd Qtr. 1987 7-9/87	4th Qtr. 1987 9-12/87	1st Qtr. 1988 1-3/88	2nd Qtr. 1988 4-6/88	3rd Qtr. 1988 7-9/88	4th Qtr. 1988 10-12/88	1st Qtr. 1989 1-3/89	2nd Qtr. 1989 4-6/89	3rd Qtr. 1989 7-9/89	4th Qtr. 1989 10-12/89	1st Qtr. 1990 1-3/90
M4-132	16	(AL)	NS	NS	NS	17.	NS	23	NS	25	NS	29	NS	NS	NS	NS	NS	NS
Vinyl Chloride by E624																		
M4-10	0.5	(AL)	NS	NS	NS	NS	NS	NS	810.	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-54	0.5	(AL)	NS	NS	NS	NS	77.	NS	20	NS	NS	NS	NS	NS	NS	NS	NS	NS
Tetrachloroethene by E624																		
M4-415	5	(AL)	NS	NS	NS	NS	NS	NS	NS	5.5	NS	27	NS	NS	NS	NS	NS	NS
M4-55	5	(AL)	NS	NS	NS	NS	NS	NS	13.	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,1,1-Trichloroethene by E624																		
M4-11	200	(AL)	NS	NS	NS	NS	NS	NS	10000	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-12	200	(AL)	NS	NS	NS	NS	NS	NS	3200	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-14	200	(AL)	NS	NS	NS	NS	NS	NS	350.	NS	NS	NS	NS	NS	NS	NS	NS	NS
Trichloroethene by E624																		
M4-10	5	(AL)	NS	NS	NS	NS	NS	NS	910	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-11	5	(AL)	NS	NS	NS	NS	NS	NS	8000.	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-12	5	(AL)	NS	NS	NS	NS	NS	NS	4700	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-14	5	(AL)	NS	NS	NS	NS	NS	NS	350	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-15	5	(AL)	NS	NS	NS	NS	NS	NS	1000	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-270	5	(AL)	NS	NS	NS	NS	NS	NS	NS	55	NS	77.	NS	NS	NS	NS	NS	NS
M4-335	5	(AL)	NS	NS	NS	NS	NS	NS	22000.	NS	NS	35000.	NS	NS	NS	NS	NS	NS
M4-415	5	(AL)	NS	NS	NS	NS	NS	NS	NS	220.	NS	700	NS	NS	NS	NS	NS	NS
M4-53	5	(AL)	NS	NS	NS	NS	NS	NS	5.3	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-55	5	(AL)	NS	NS	NS	NS	NS	NS	9.5	NS	NS	15	NS	NS	NS	NS	NS	NS
M4-59	5	(AL)	NS	NS	NS	NS	NS	NS	7.4	NS	NS	6.6	NS	NS	NS	NS	NS	NS
M4-61	5	(AL)	NS	NS	NS	NS	NS	NS	NS	5.4	NS	72	NS	NS	NS	NS	NS	NS
M4-63	5	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	1100	NS	NS	NS	NS	NS	NS
M4-72	5	(AL)	NS	NS	NS	NS	NS	NS	530.	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-74	5	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-75	5	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-76	5	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-91	5	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-120	5	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-128	5	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-129	5	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-132	5	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-136	5	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-1005	5	(AL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-1022	5	(AL)	NS	NS	NS	NS	NS	NS	6.6	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,4-Dichlorobenzene by E625																		
M4-10	5	(AL)	NS	NS	NS	NS	NS	NS	18.	NS	NS	NS	NS	NS	NS	NS	NS	NS
M4-14	5	(AL)	NS	NS	NS	NS	NS	NS	6.3	NS	NS	NS	NS	NS	NS	NS	NS	NS

(Continued.)

ALL UNITS ARE ug/l  
M4 = Monitoring Well  
B = Detected in blank, result not corrected  
NA = Not analyzed  
NC = Result not confirmed in second column analysis  
AL = DFS Action Level  
S = Determined by Method of Standard Addition  
NE = Threshold value not established  
DL = Diluted out of the confirmation run  
PML = US EPA Primary Maximum Contaminant Level  
C = Confirmed on second column  
NS = Not sampled  
MCL = HHS Maximum Contaminant Level  
ND = Not detected at specified Detection Limit  
P = Previously confirmed column



APPENDIX A-2 (Continued)

Analyte Name	Maximum Contaminant Level Or Action Level	Round 1	Round 2	Round 3	4th Qtr.	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	1st Qtr.
Well Number		1985	1985	1986	1986	1987	1987	1987	1987	1988	1988	1988	1988	1989
M4-33S	5 (MCL)	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
<p> <b>ML</b> = Monitoring Well  <b>B</b> = Detected in blank, result not corrected  <b>NA</b> = Not analyzed  <b>NC</b> = Result not confirmed in second column analysis  <b>IL</b> = Diluted out of the confirmation run  <b>AL</b> = DHS Action Level  <b>S</b> = Determined by Method of Standard Addition  <b>NE</b> = Threshold value not established  <b>ML</b> = DHS Maximum Contaminant Level  <b>ND</b> = Not detected at specified Detection Limit  <b>P</b> = Previously confirmed column </p>														

PLATE 1.

LOCATIONS OF WELLS

McCLELLAN AFB  
GROUNDWATER SAMPLING  
& ANALYSIS PROGRAM

JANUARY-MARCH 1990  
DATA SUMMARY

LEGEND:

- McCLELLAN AFB BOUNDARY
- (AREA) BOUNDARIES OF PAST DISPOSAL  
STORAGE SITES
- CULVERTS
- STREAMS/DRAINAGES
- MONITORING WELL  
IN SAMPLING PROGRAM
- MONITORING WELL, NOT SAMPLED
- ⊕ EXTRACTION WELL
- † DRY WELL
- ⊗ ABANDONED WELL
- ★ ACTIVE WATER SUPPLY WELL
- ☼ INACTIVE WATER SUPPLY WELL



0 2000  
SCALE IN FEET

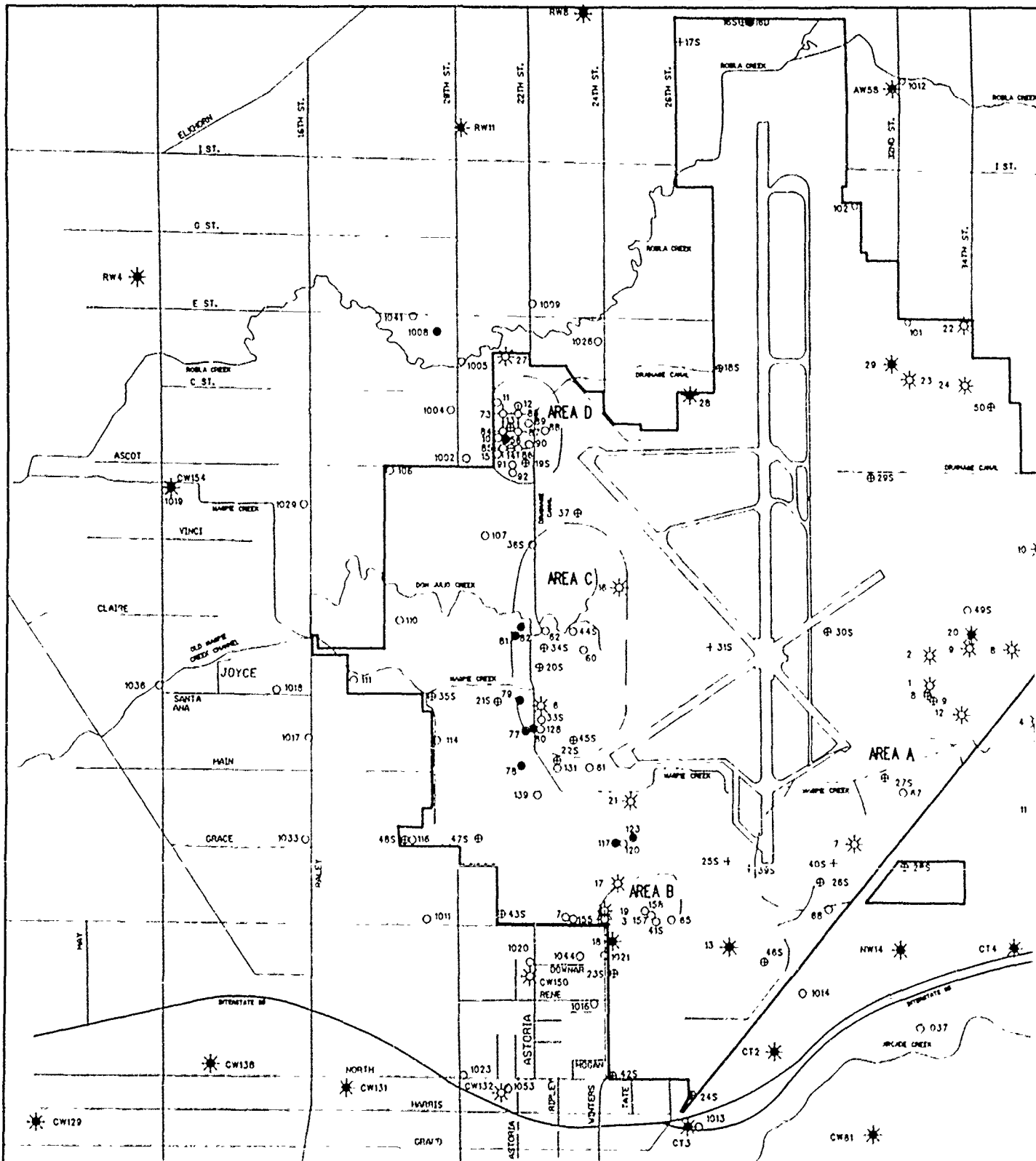
GENERATED BY *Virginia Zewski* DATE:

PEER REVIEW *Deena Stanley* DATE: 8/8/90

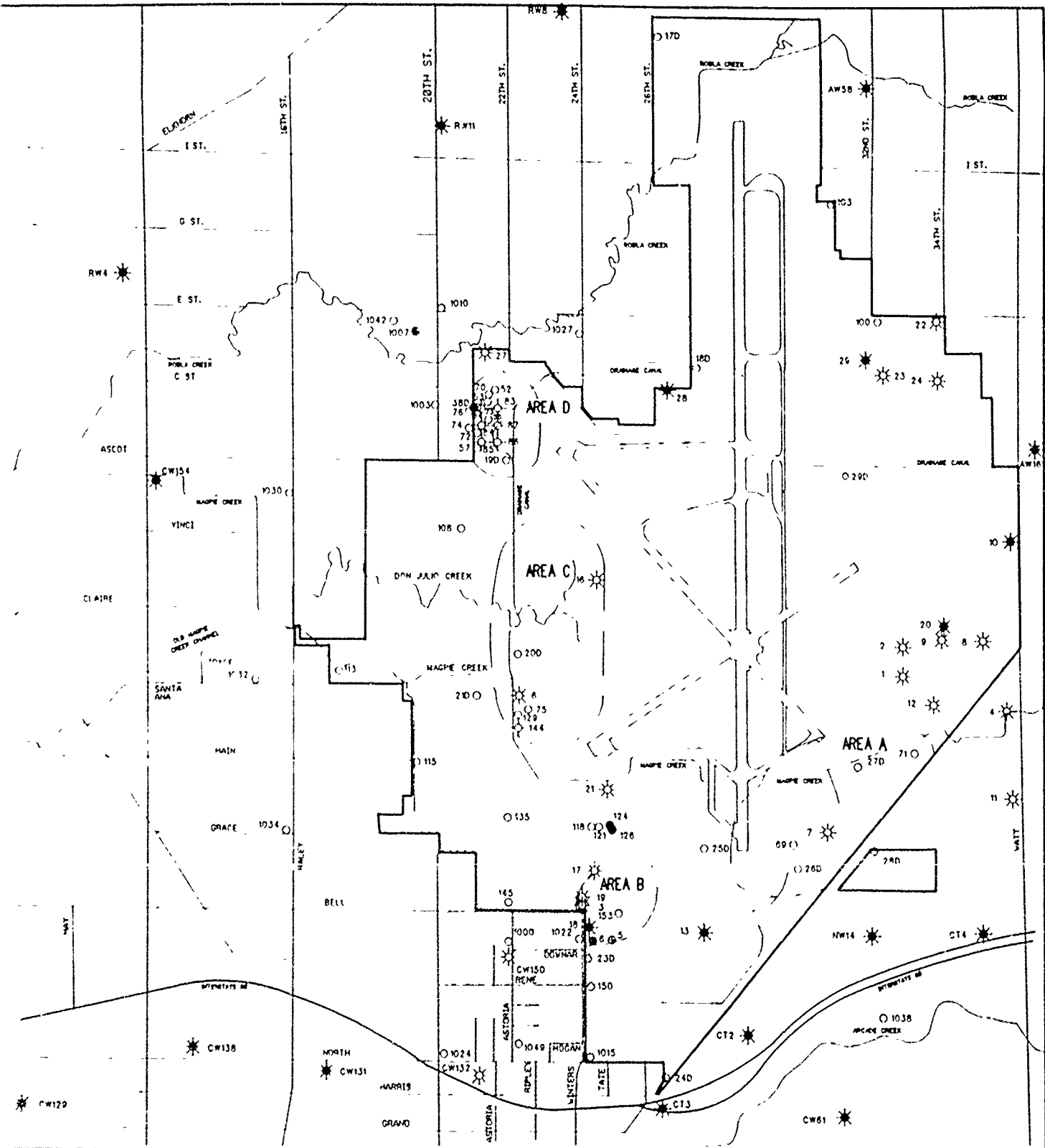
PROJECT REVIEW *J. L. Thompson* DATE: 8/8/90

**RADIAN**  
CORPORATION

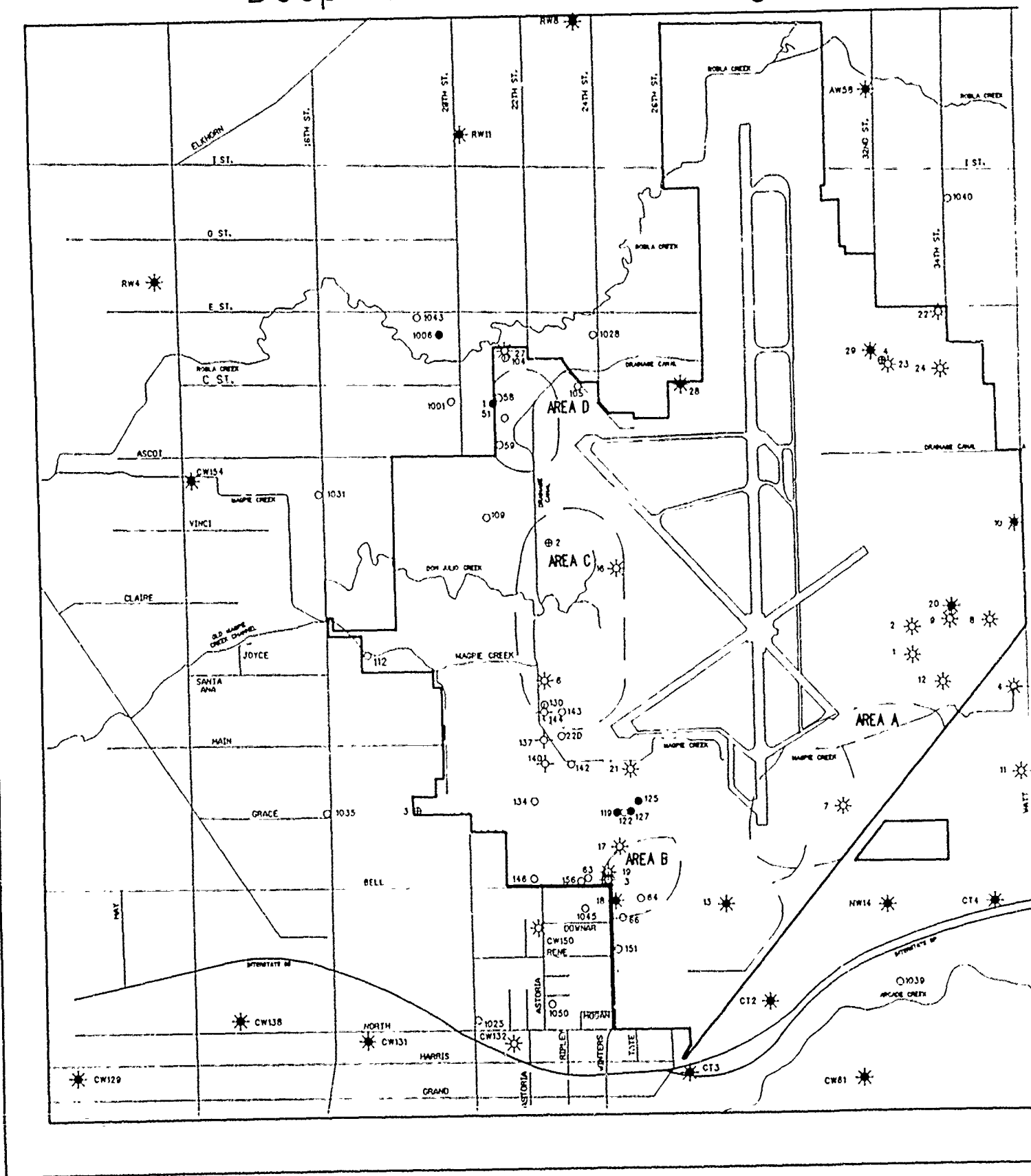
## Shallow Zone Monitoring Wells



## Middle Zone Monitoring Wells



# Deep "A" Zone Monitoring Wells



# Deep "B" Zone and Deeper Monitoring Wells

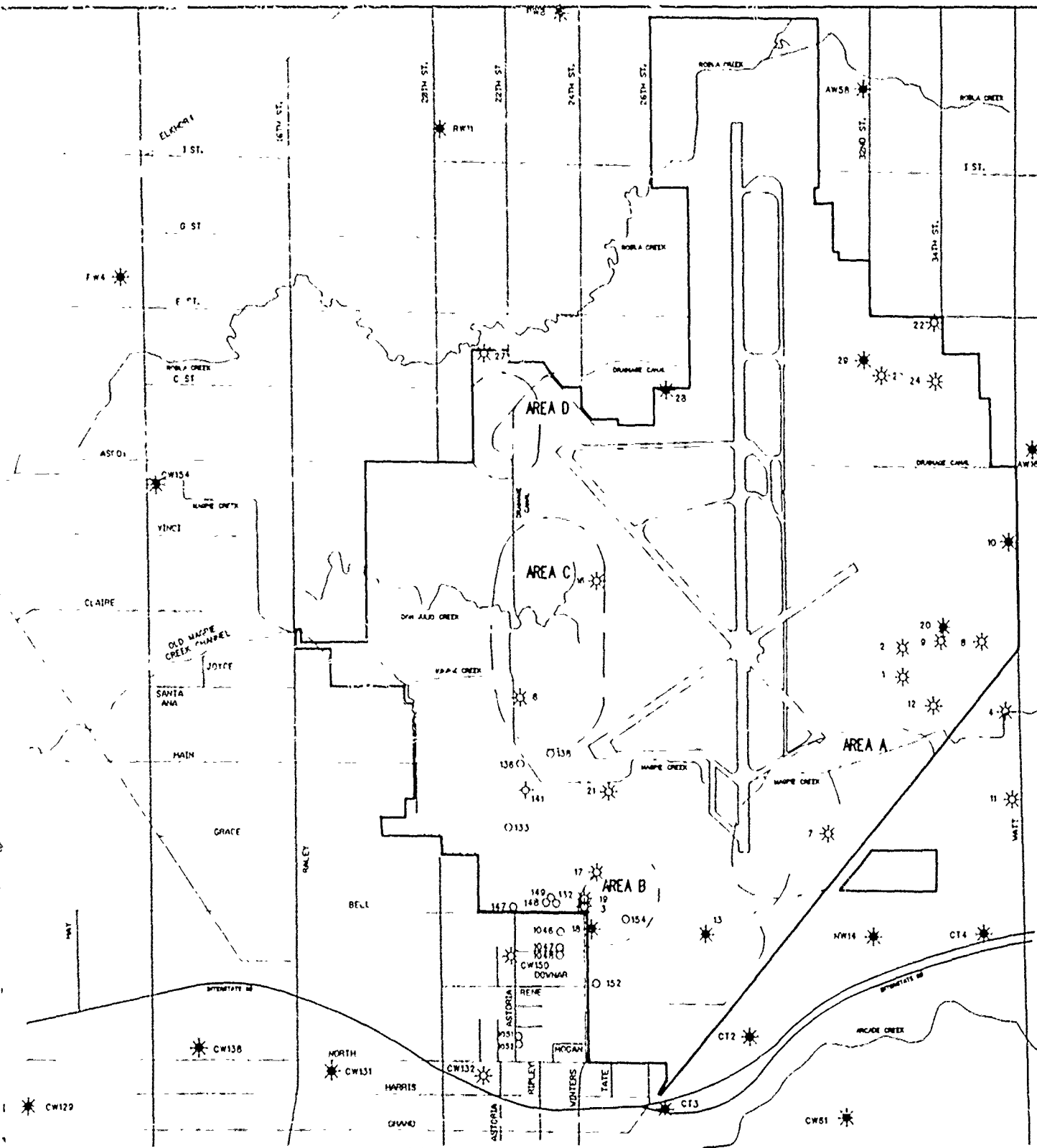


PLATE 2.

SHALLOW MONITORING ZONE  
(ABOVE -55 FT. MSL)  
POTENTIOMETRIC SURFACE MAP

for Data Collected  
January 8, 9, and 10, 1990

McCLELLAN AFB  
Groundwater Sampling  
& Analysis Program

JANUARY-MARCH 1990

LEGEND:

- McCLELLAN AFB BOUNDARY
- - - - - STREAMS/DRAINAGE (DOTTED WHERE COVERED)
- ⋄ EXTRACTION WELLS
- MONITORING WELLS
- \* WATER SUPPLY WELLS (INACTIVE)
- \* WATER SUPPLY WELLS (ACTIVE)
- POTENTIOMETRIC SURFACE CONTOURS.  
HACHURES INDICATE DIRECTION OF  
GROUNDWATER MOVEMENT. CONTOUR  
LINE ELEVATION IN FEET MSL.



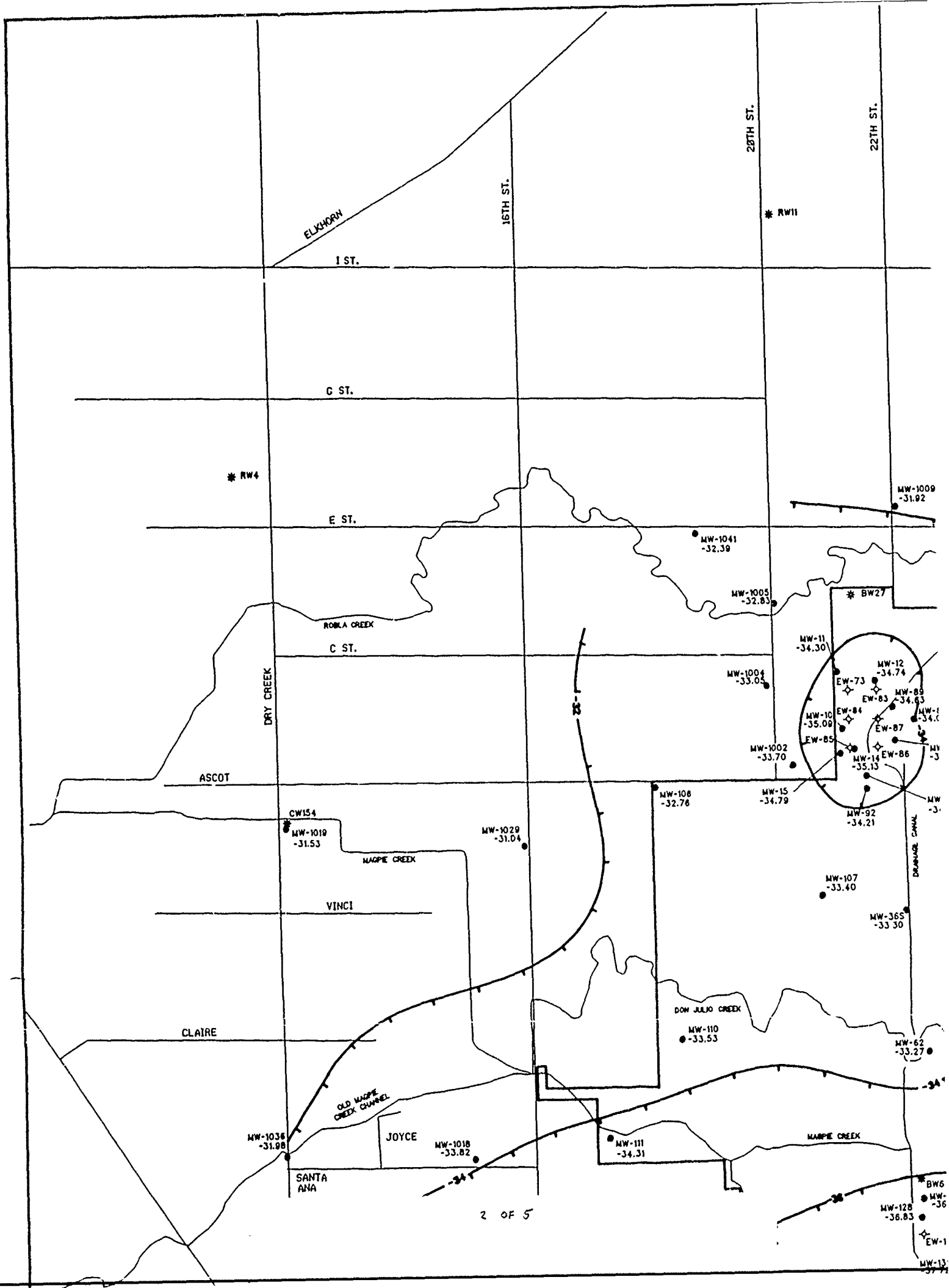
0 1000  
SCALE IN FEET

GENERATED BY: *Virginia Jewell* DATE: 8/7/90

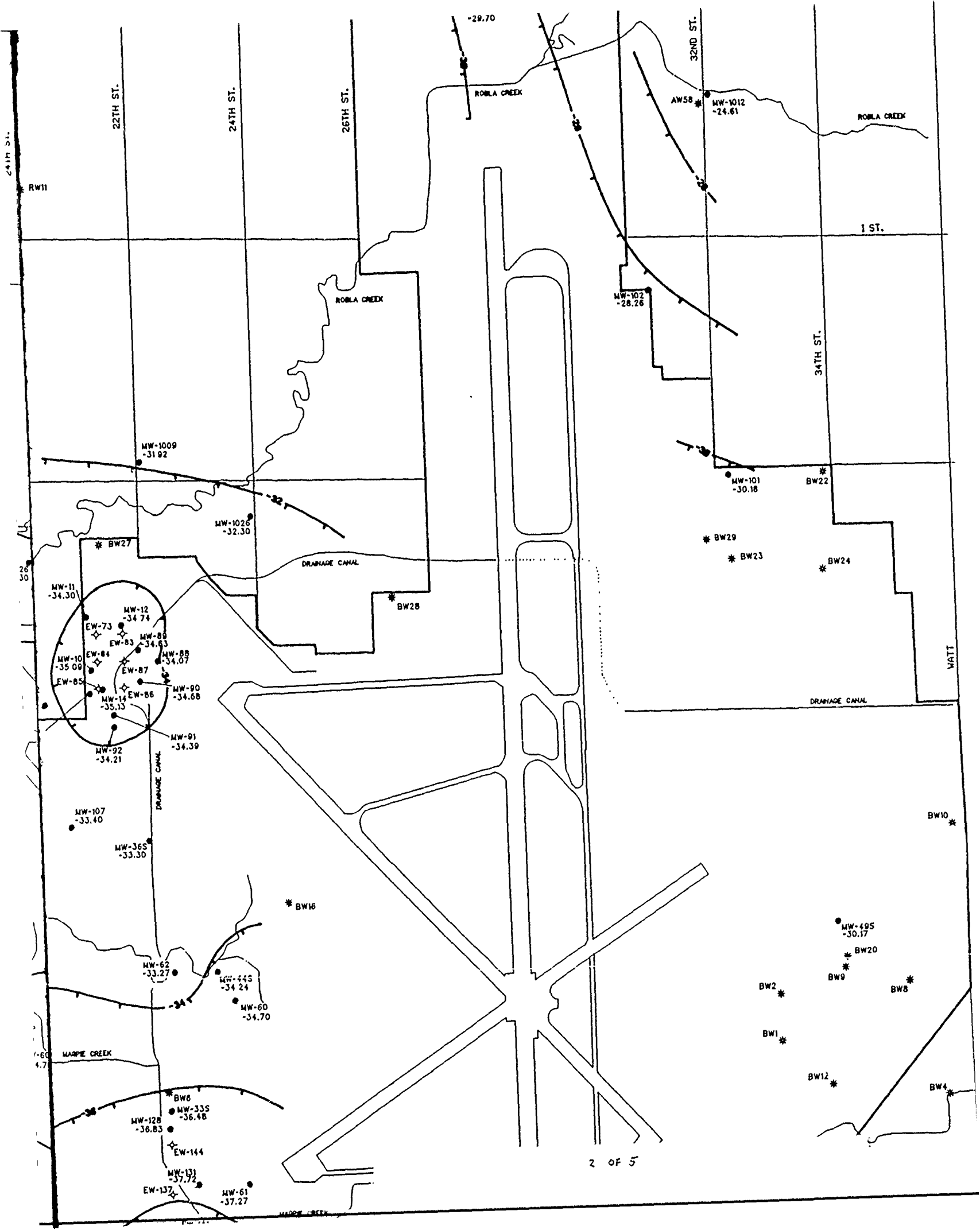
PEER REVIEW: *Deanna Stanley* DATE: 8/8/90

PROJECT REVIEW: *Julia P. Thomas* DATE: 8/8/90

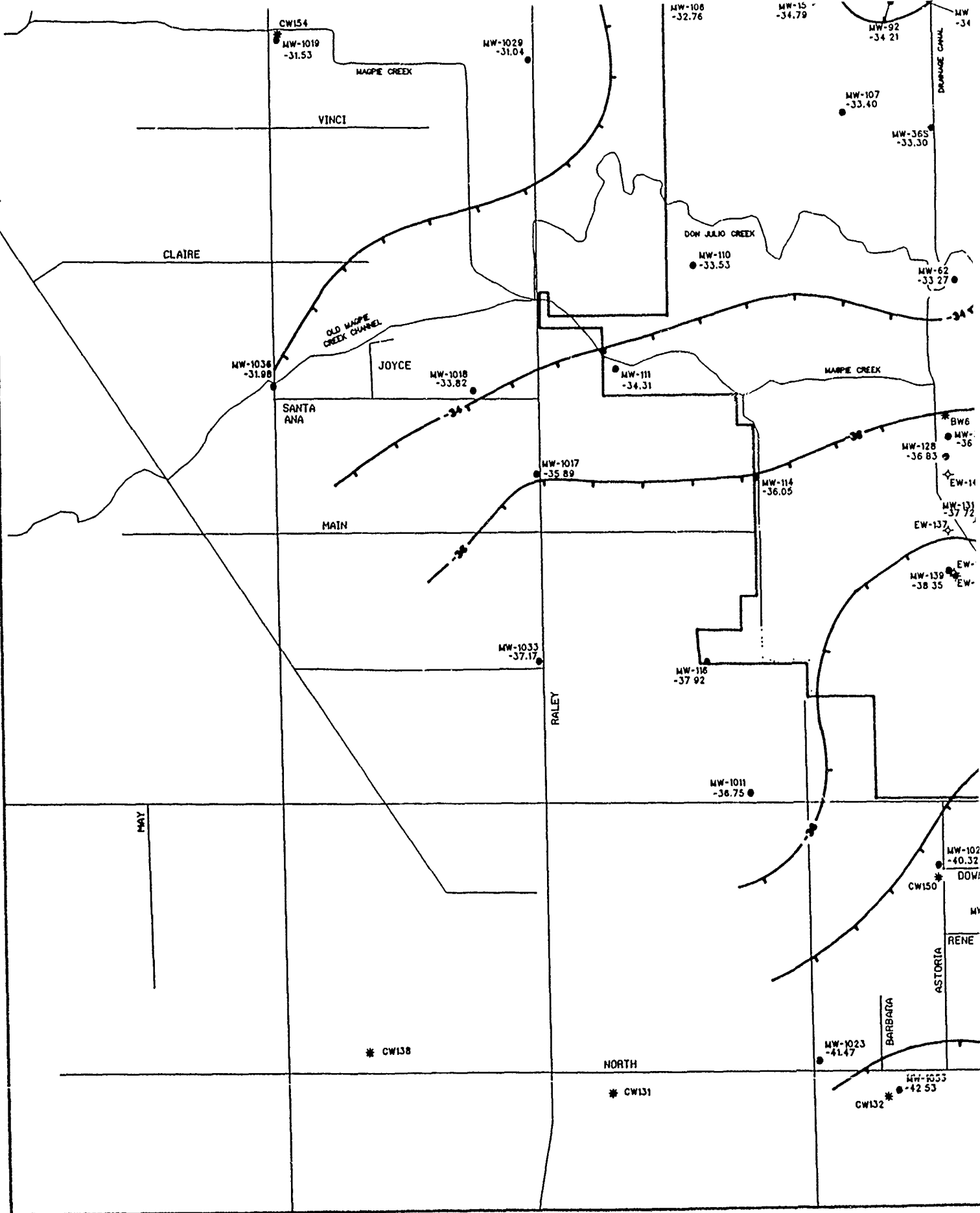
**RADIAN**  
**CORPORATION**







P



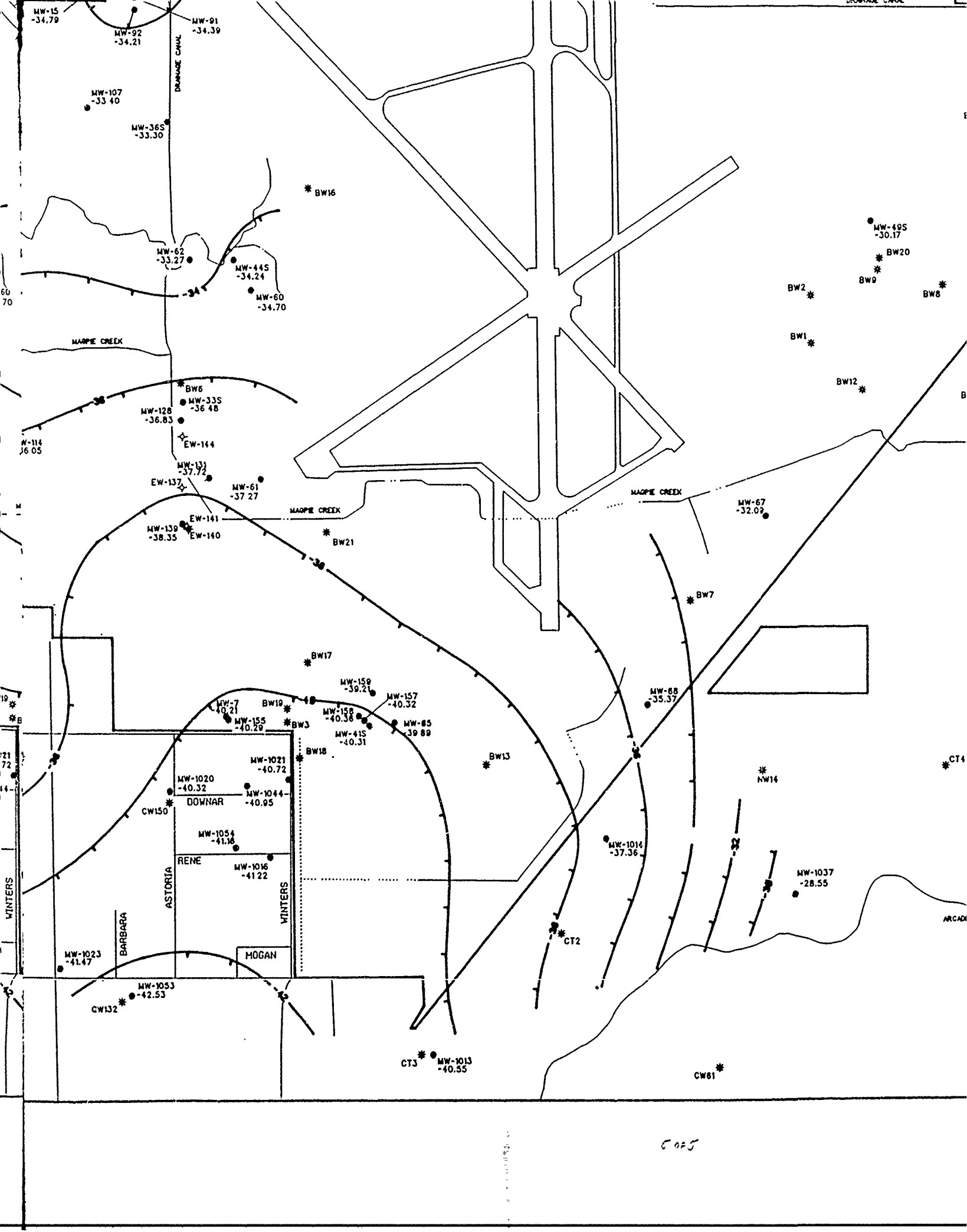


PLATE 3.

AREA D-SHALLOW MONITORING ZONE  
(ABOVE -55 FT. MSL)  
POTENTIOMETRIC SURFACE MAP

for Data Collected  
January 8,9, and 10, 1990

McCLELLAN AFB  
Groundwater Sampling  
& Analysis Program  
JANUARY-MARCH 1990

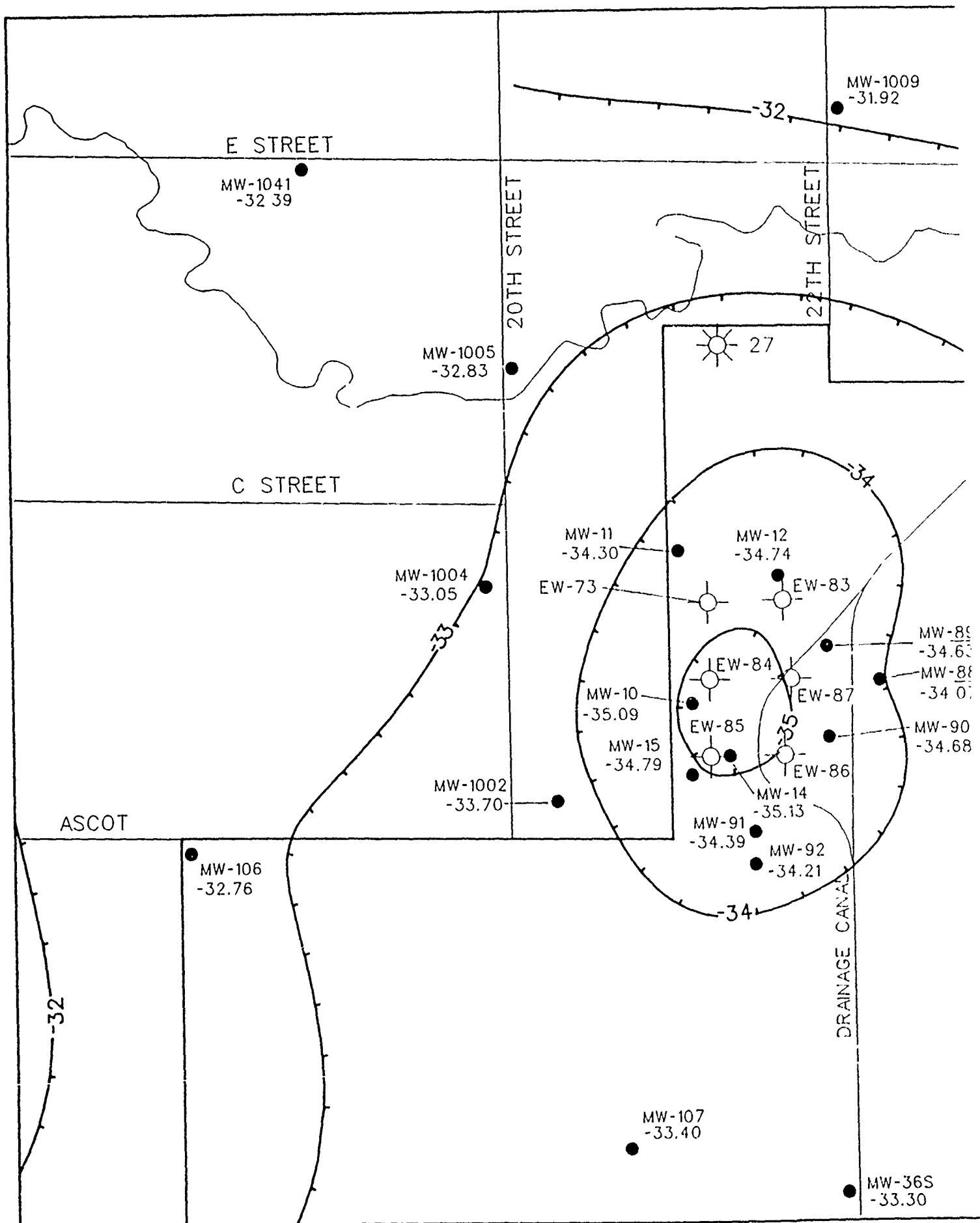
LEGEND:

- McCLELLAN AFB BOUNDARY
- ..... STREAMS/DRAINAGE (DOTTED WHERE COVERED)
- ◇ EXTRACTION WELLS
- MONITORING WELLS
- \* WATER SUPPLY WELLS (INACTIVE)
- \* WATER SUPPLY WELLS (ACTIVE)
- POTENTIOMETRIC SURFACE CONTOURS.  
HACHURES INDICATE DIRECTION OF  
GROUNDWATER MOVEMENT. CONTOUR  
LINE ELEVATION IN FEET MSL.



GENERATED BY: *Virginia Lewick* DATE: 8/7/90  
PEER REVIEW: *Deena A. Stanley* DATE: 8/8/90  
PROJECT REVIEW: *Gyle P. Thompson* DATE: 8/8/90

**RADIAN**  
CORPORATION



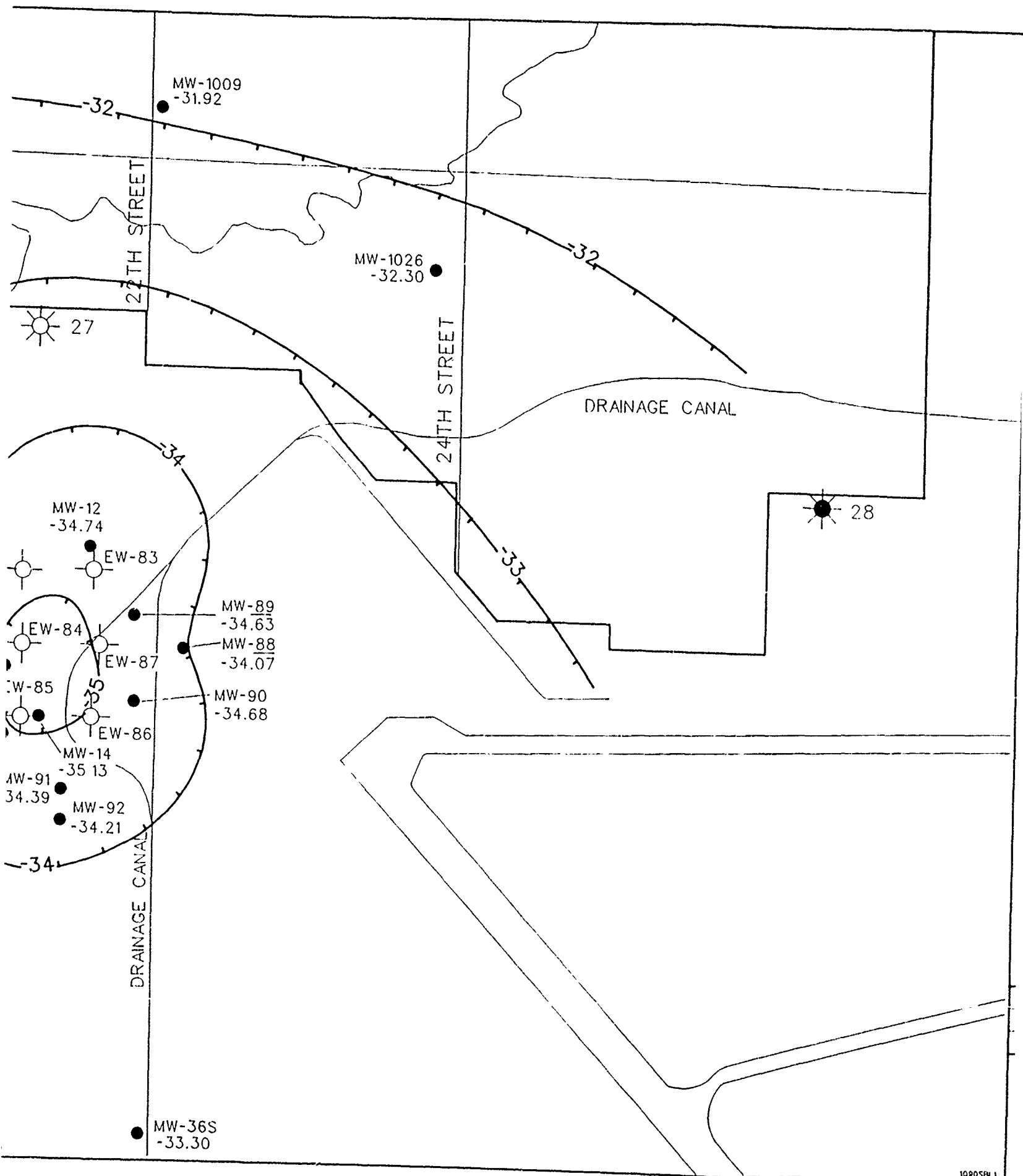


PLATE 4.

MIDDLE MONITORING ZONE  
(-55 TO -100 FT. MSL)  
POTENTIOMETRIC SURFACE MAP

for Data Collected  
January 8,9, and 10, 1990

McCLELLAN AFB  
Groundwater Sampling  
& Analysis Program

JANUARY-MARCH 1990

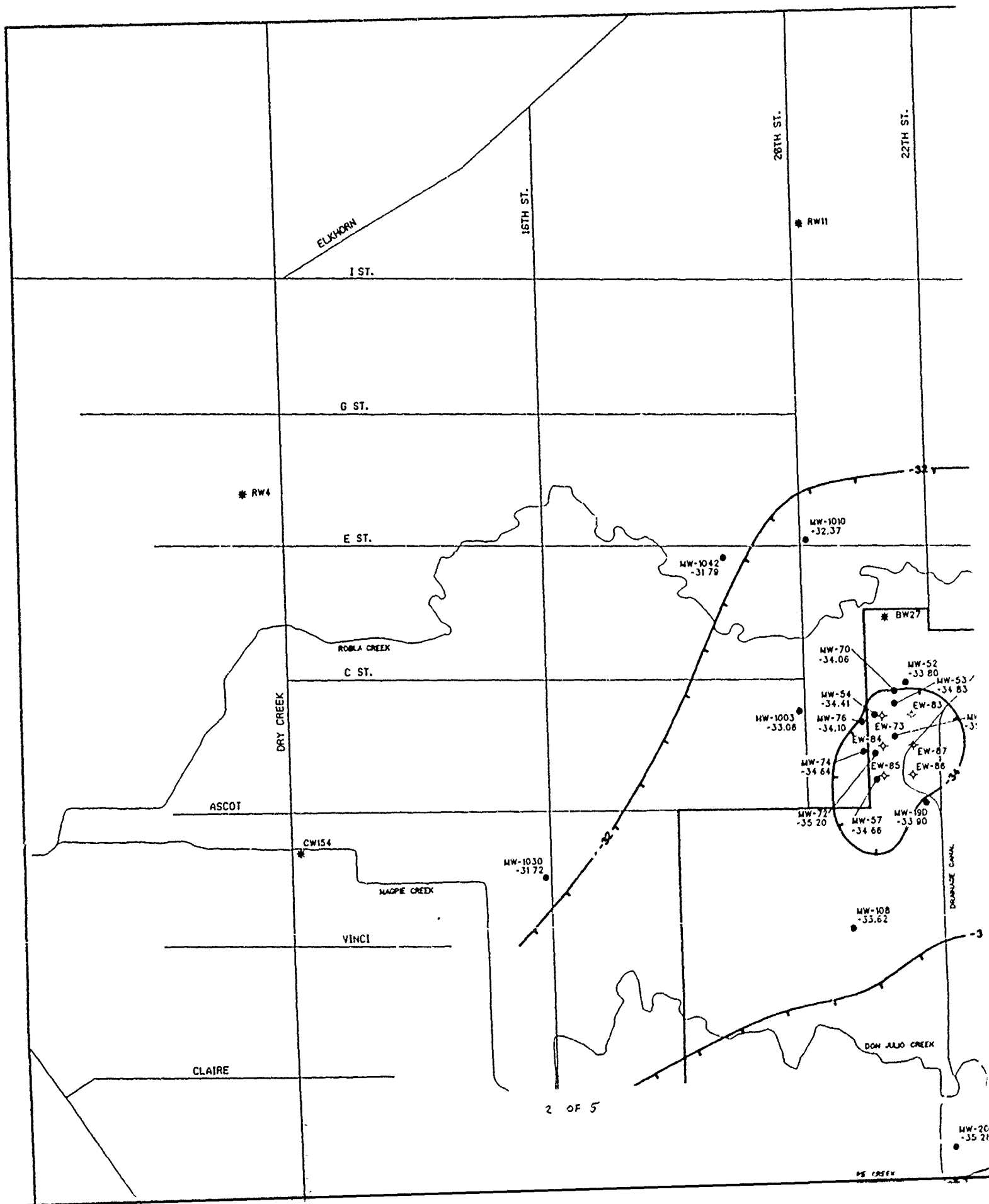
LEGEND:

- McCLELLAN AFB BOUNDARY
- STREAMS/DRAINAGE (DOTTED WHERE COVERED)
- ◇ EXTRACTION WELLS
- MONITORING WELLS
- \* WATER SUPPLY WELLS (INACTIVE)
- \* WATER SUPPLY WELLS (ACTIVE)
- POTENTIOMETRIC SURFACE CONTOURS.  
HACHURES INDICATE DIRECTION OF  
GROUNDWATER MOVEMENT. CONTOUR  
LINE ELEVATION IN FEET MSL.

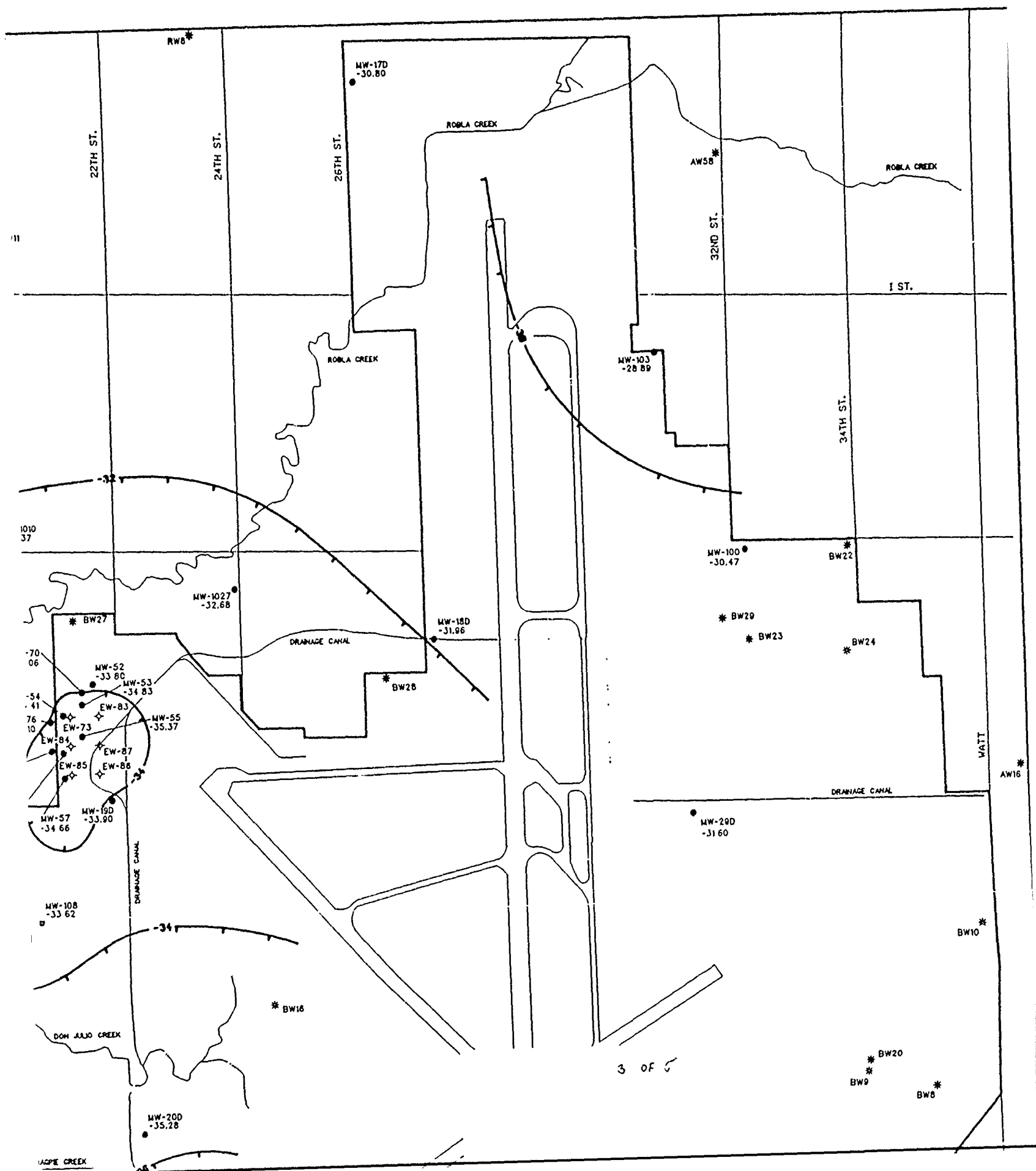


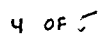
GENERATED BY: *Virginia Zennaro* DATE: 8/7/90  
PEER REVIEW: *Debra C. Spiller* DATE: 8/8/90  
PROJECT REVIEW: *Lyle P. Thompson* DATE: 8/8/90

**RADIAN**  
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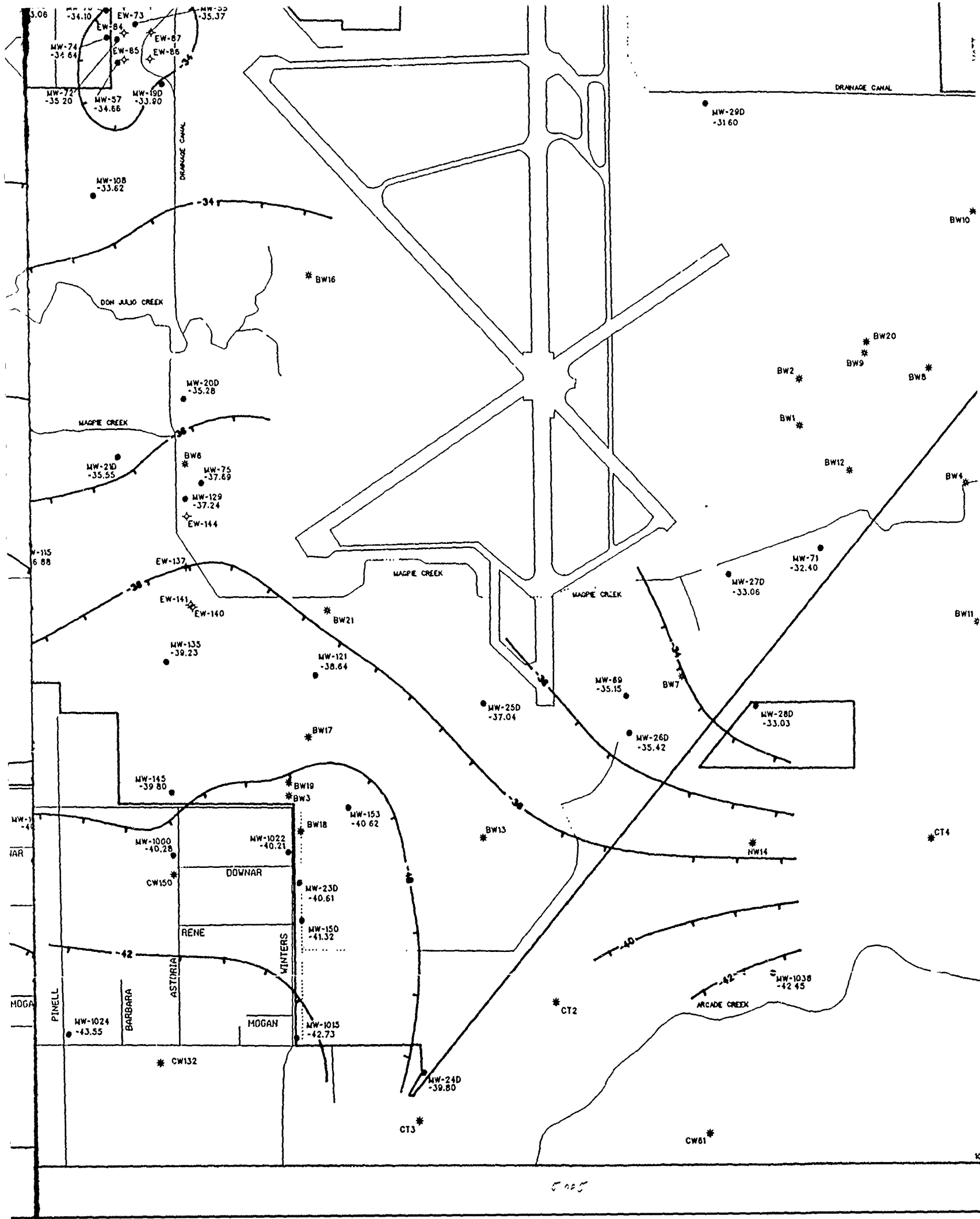


PLATE 5.

AREA D-MIDDLE MONITORING ZONE  
(-55 TO -100 FT. MSL)  
POTENTIOMETRIC SURFACE MAP

for Data Collected  
January 8, 9, and 10, 1990

McCLELLAN AFB  
Groundwater Sampling  
& Analysis Program  
JANUARY-MARCH 1990

LEGEND:

- McCLELLAN AFB BOUNDARY
- ..... STREAMS/DRAINAGE (DOTTED WHERE COVERED)
- ◇ EXTRACTION WELLS
- MONITORING WELLS
- \* WATER SUPPLY WELLS (INACTIVE)
- \* WATER SUPPLY WELLS (ACTIVE)
- POTENTIOMETRIC SURFACE CONTOURS.  
HACHURES INDICATE DIRECTION OF  
GROUNDWATER MOVEMENT. CONTOUR  
LINE ELEVATION IN FEET MSL.

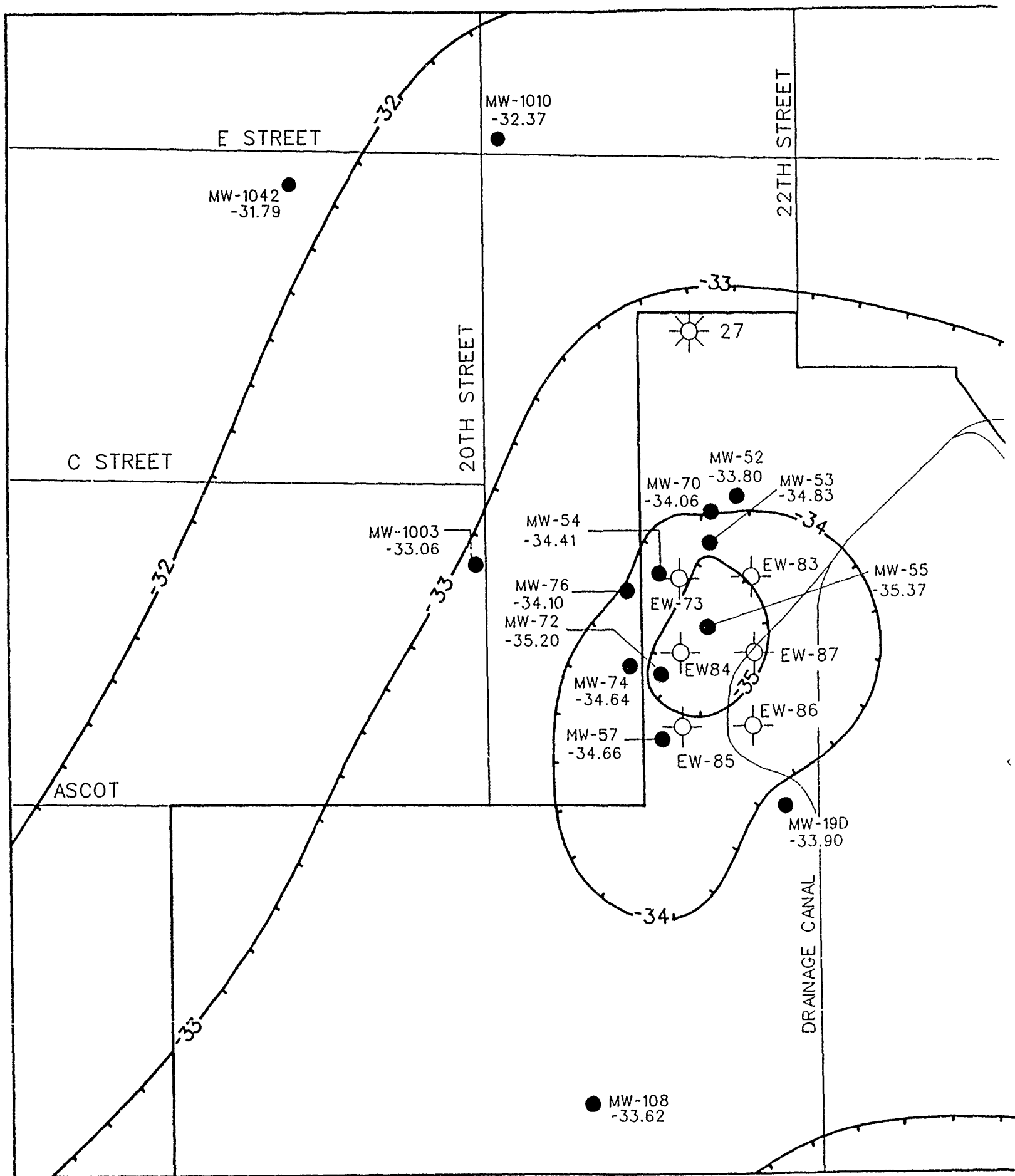


GENERATED BY: *Virginia Lewis* DATE: 8/7/90

PEER REVIEW: *Deanna Stanley* DATE: 8/8/90

PROJECT REVIEW: *G. B. Thompson* DATE: 8/8/90

**RADIAN**  
CORPORATION



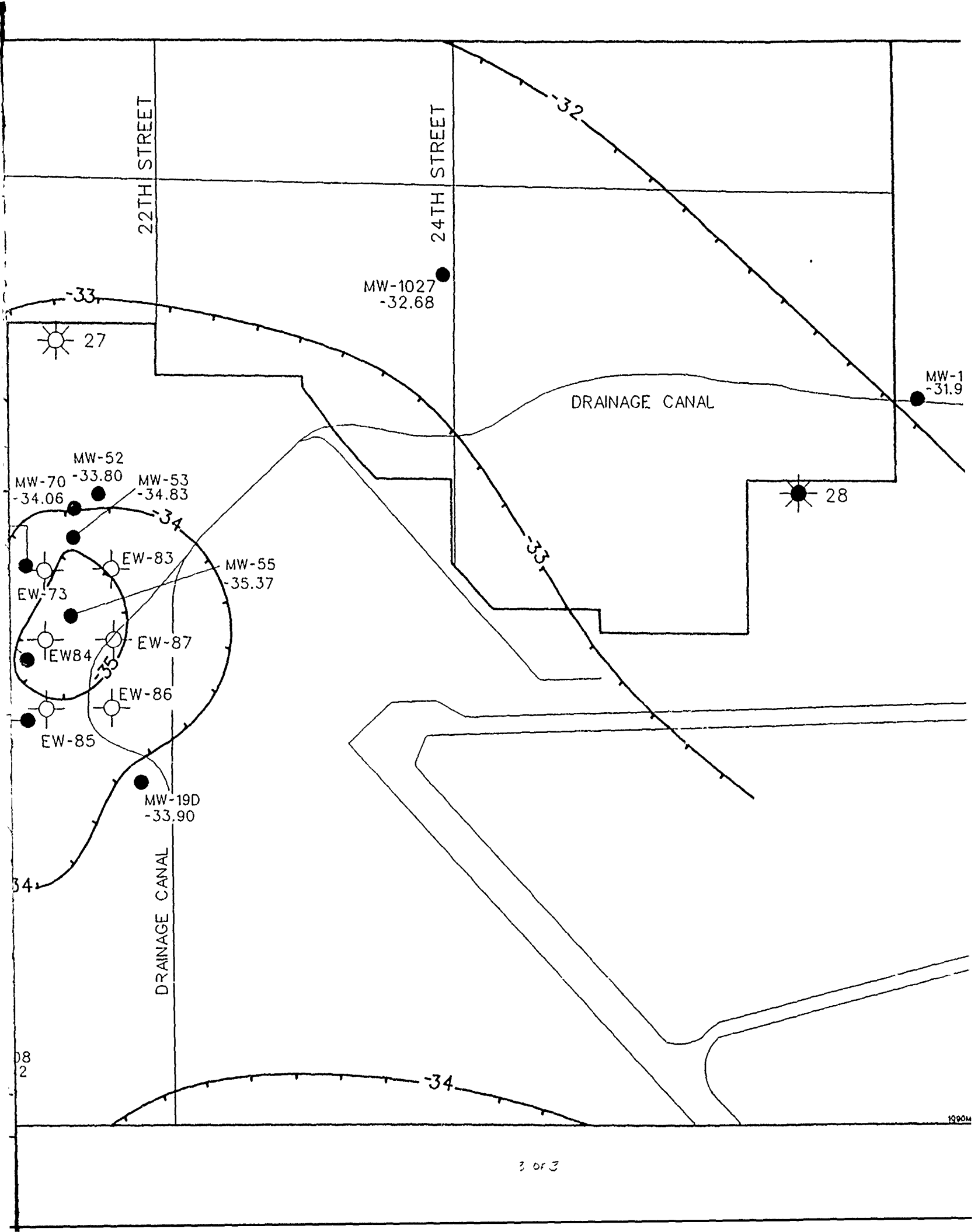


PLATE 6.

DEEP A MONITORING ZONE  
(-100 TO -150 FT. MSL)  
POTENTIOMETRIC SURFACE MAP

for Data Collected  
January 8, 9, and 10, 1990

McCLELLAN AFB  
Groundwater Sampling  
& Analysis Program

JANUARY-MARCH 1990

LEGEND:

- McCLELLAN AFB BOUNDARY
- ..... STREAMS/DRAINAGE (DOTTED WHERE COVERED)
- ◇ EXTRACTION WELLS
- MONITORING WELLS
- \* WATER SUPPLY WELLS (INACTIVE)
- \* WATER SUPPLY WELLS (ACTIVE)
- POTENTIOMETRIC SURFACE CONTOURS.  
HACHURES INDICATE DIRECTION OF  
GROUNDWATER MOVEMENT. CONTOUR  
LINE ELEVATION IN FEET MSL.



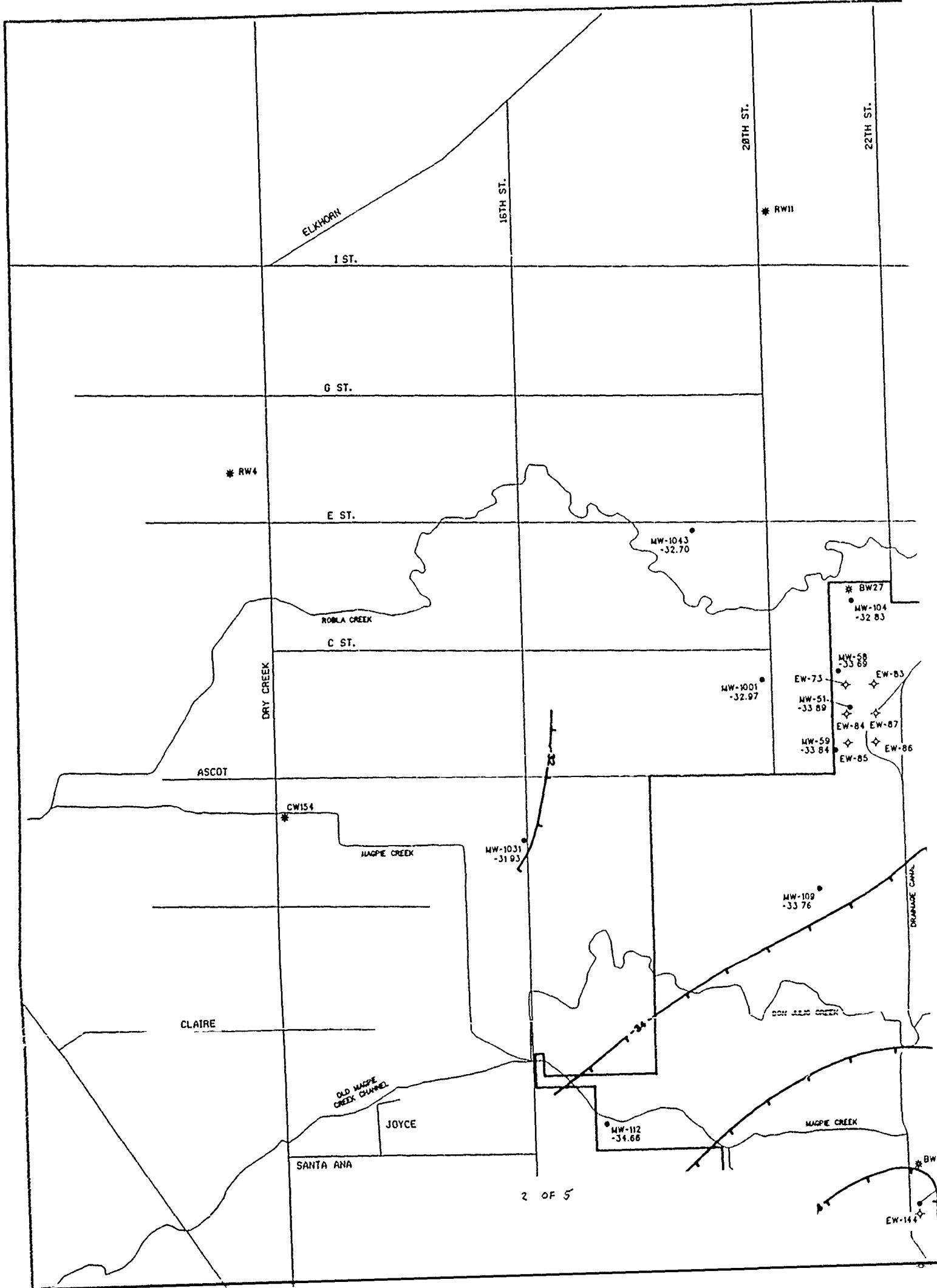
0 1000  
SCALE IN FEET

GENERATED BY: *Virginia Lewill* DATE: *8/7/90*

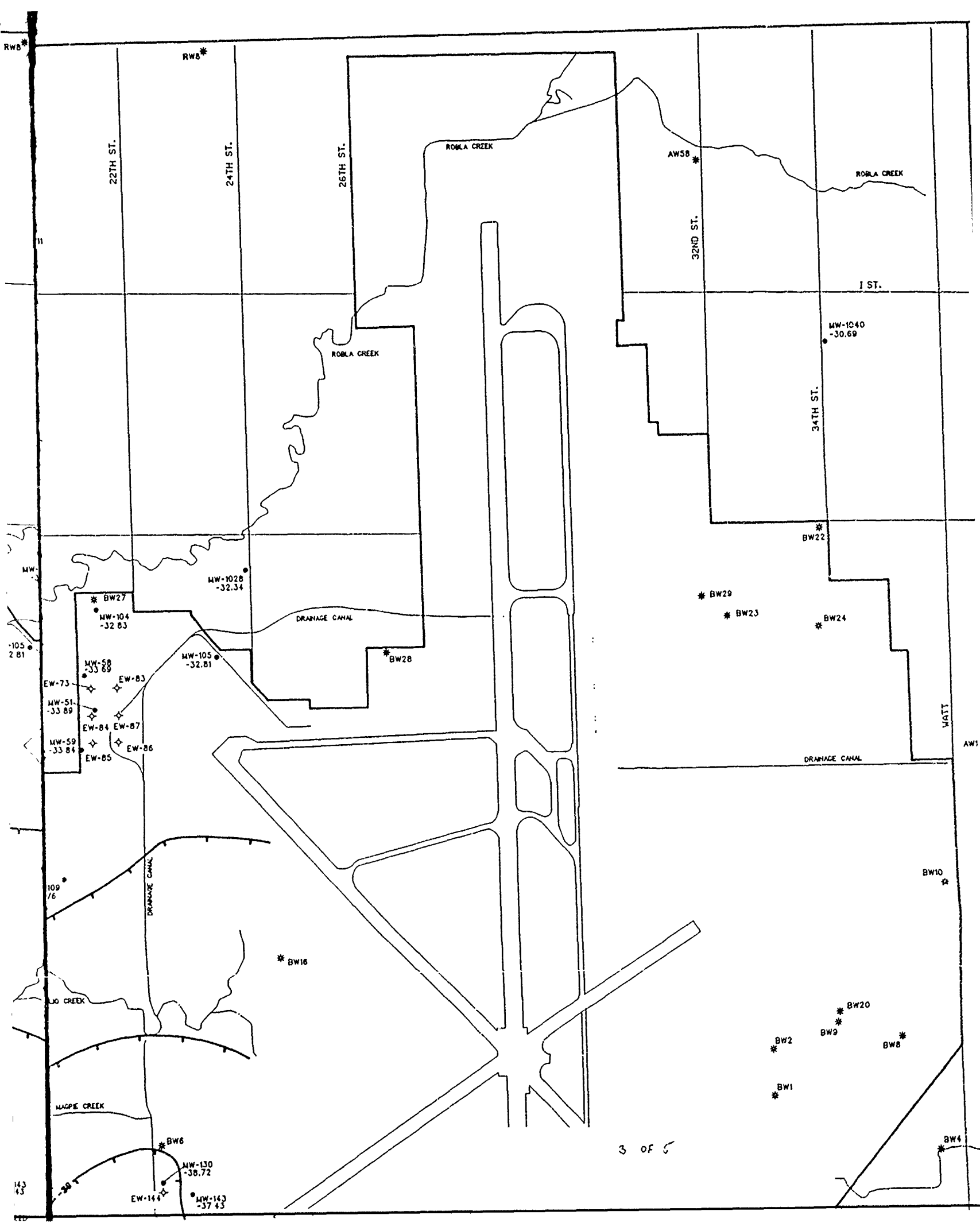
PEER REVIEW: *Deena O'Standley* DATE: *8/8/90*

PROJECT REVIEW: *Jyle P. Thompson* DATE: *8/8/90*

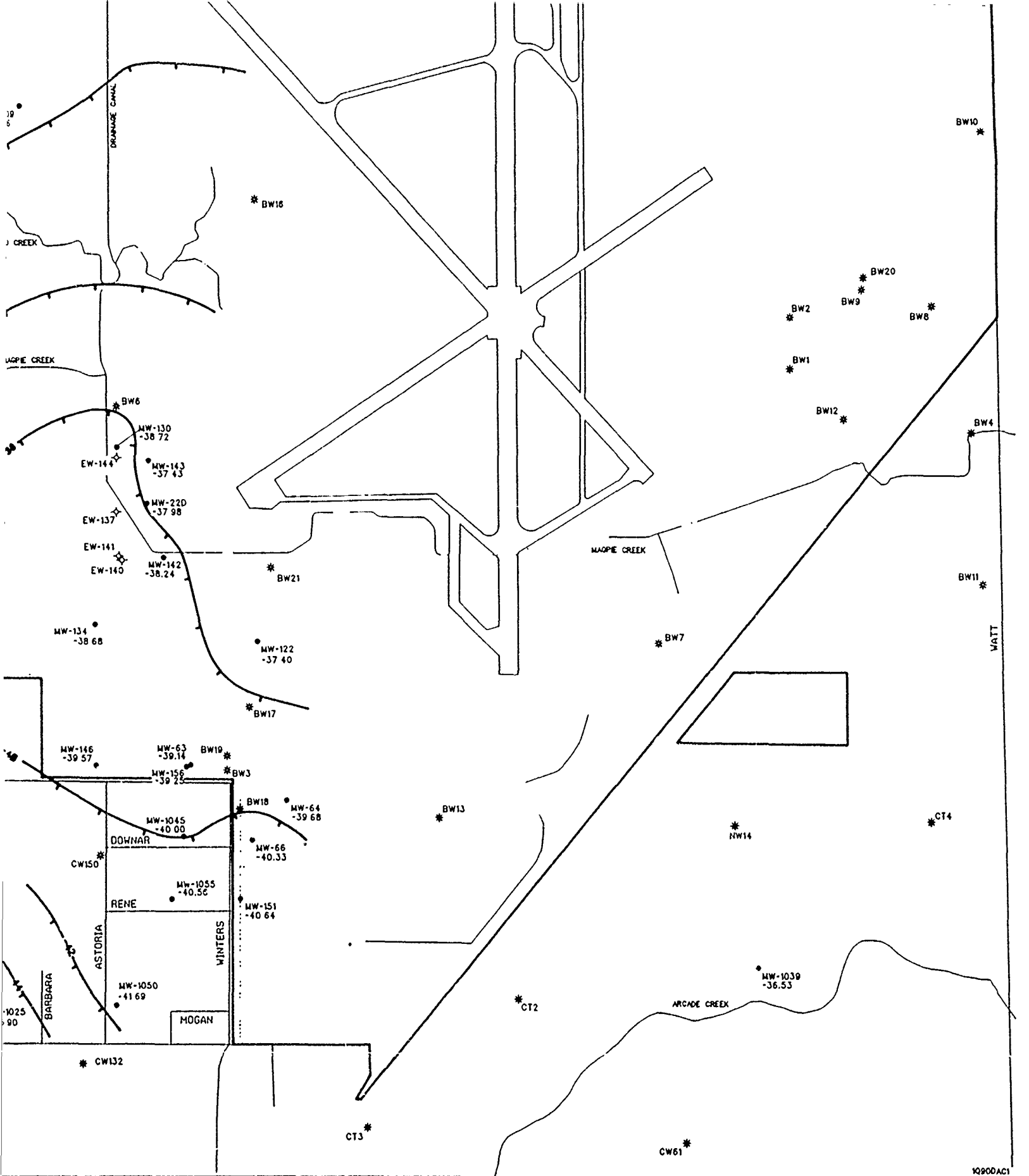
**RADIAN**  
**CORPORATION**











DEEP B MONITORING ZONE  
(BELOW -150 FT. MSL)  
POTENTIOMETRIC SURFACE MAP

for Data Collected  
January 8,9, and 10, 1990

McCLELLAN AFB  
Groundwater Sampling  
& Analysis Program

JANUARY-MARCH 1990

LEGEND:

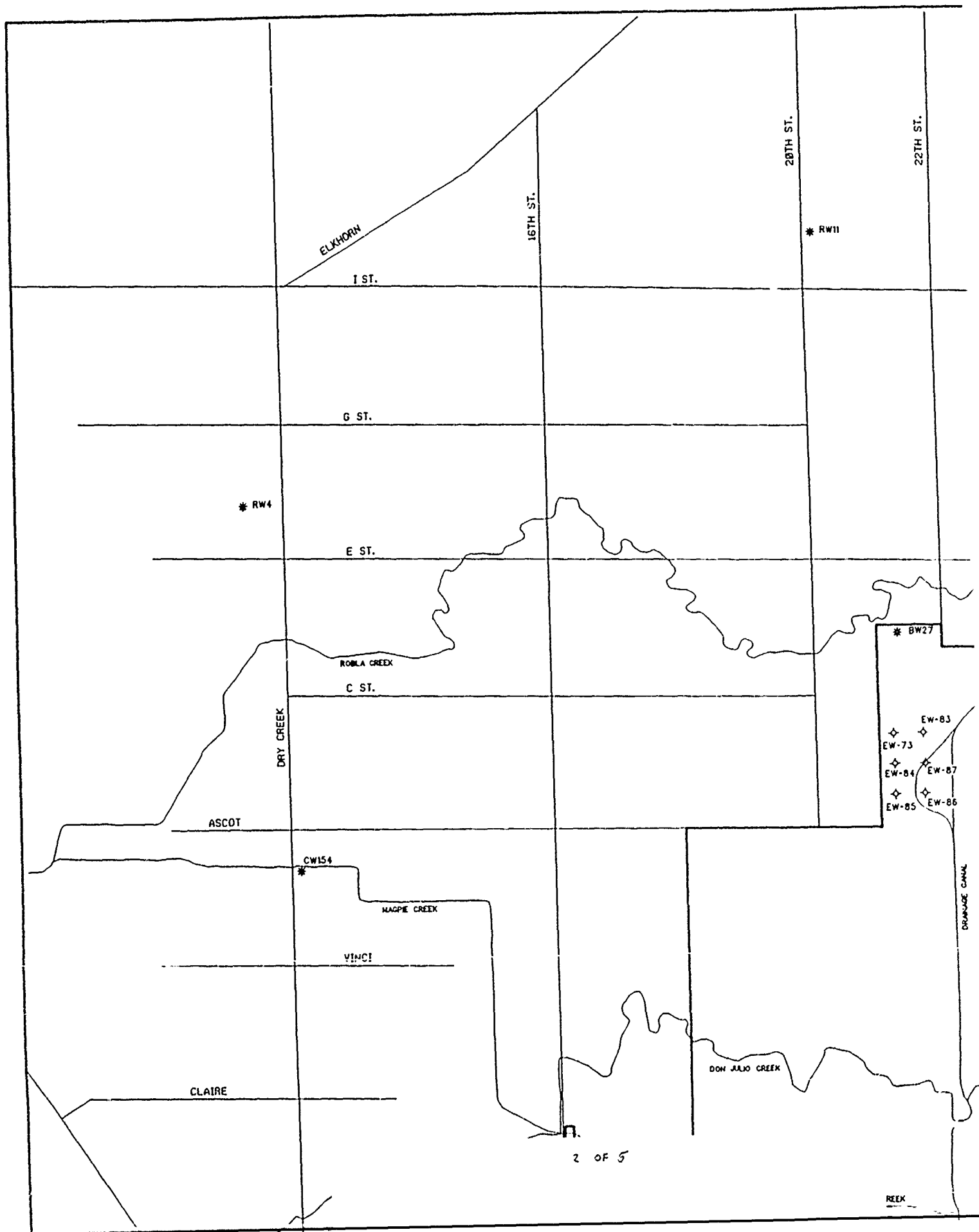
- McCLELLAN AFB BOUNDARY
- STREAMS/DRAINAGE (DOTTED WHERE COVERED)
- ◇ EXTRACTION WELLS
- MONITORING WELLS
- \* WATER SUPPLY WELLS (INACTIVE)
- \* WATER SUPPLY WELLS (ACTIVE)
- POTENTIOMETRIC SURFACE CONTOURS.  
HACHURES INDICATE DIRECTION OF  
GROUNDWATER MOVEMENT. CONTOUR  
LINE ELEVATION IN FEET MSL.

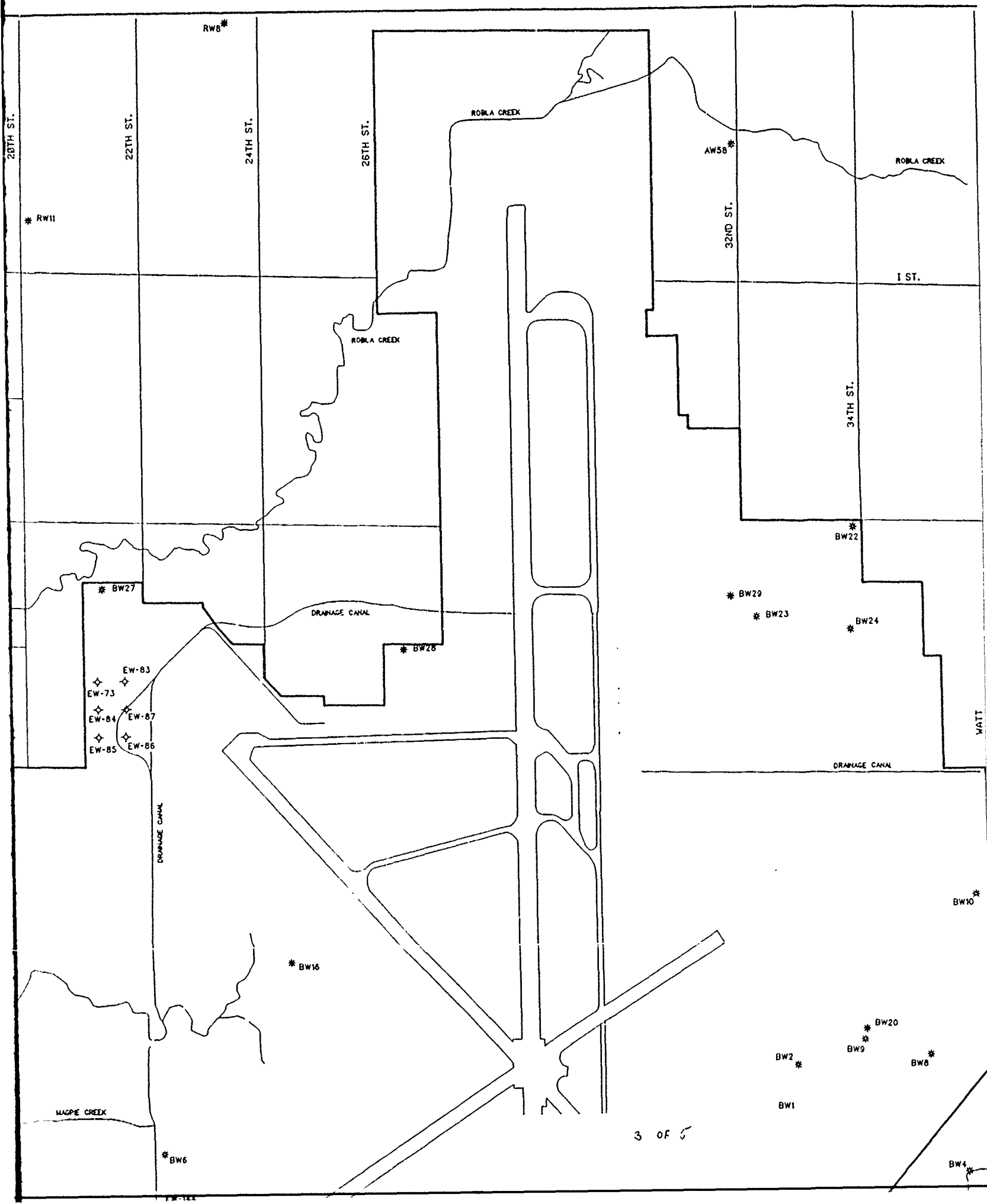


0 1000  
SCALE IN FEET

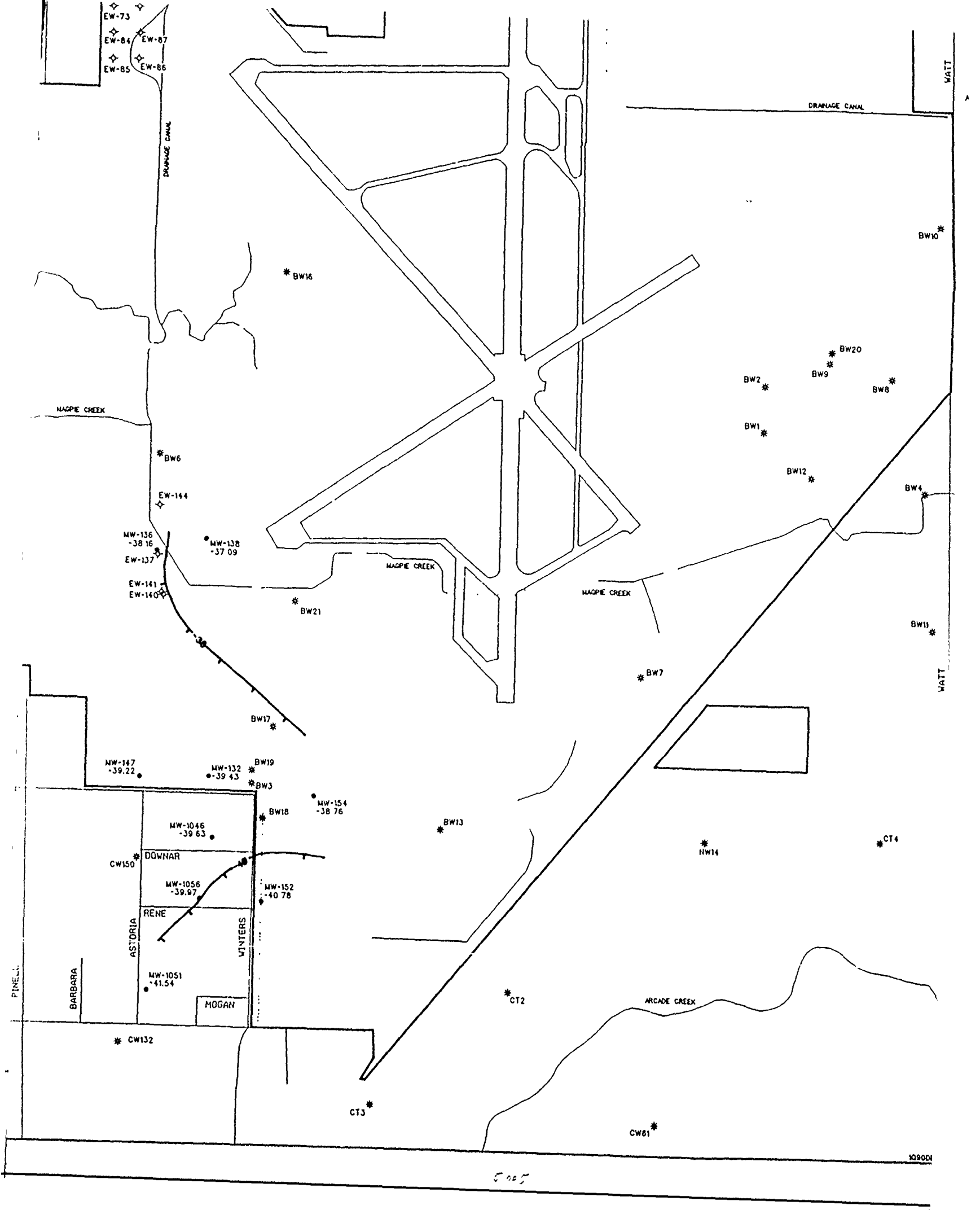
GENERATED BY: *Virginia Jenrich* DATE: *8/7/90*  
PEER REVIEW: *Deana A. S. S. S.* DATE: *8/8/90*  
PROJECT REVIEW: *Dyle P. Thompson* DATE: *8/8/90*

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TCE Concentrations in the  
Shallow Monitoring Zone  
(-Above -55 Ft. MSL)

McClellan AFB  
Groundwater Sampling  
& Analysis Program

JANUARY-MARCH 1990  
DATA SUMMARY

LEGEND:

- McCLELLAN AFB BOUNDARY
- ..... STREAMS/DRAINAGE (DOTTED WHERE COVERED)
- ◇ EXTRACTION WELLS
- MONITORING WELLS
- 55 TCE CONCENTRATIONS IN ug/l
- ND TCE NOT DETECTED
- ( ) BOUNDARIES OF PAST DISPOSAL/STORAGE AREAS

NOTE: AREA D EXTRACTION WELLS ARE SCREENED  
ACROSS THE SHALLOW AND MIDDLE ZONES.

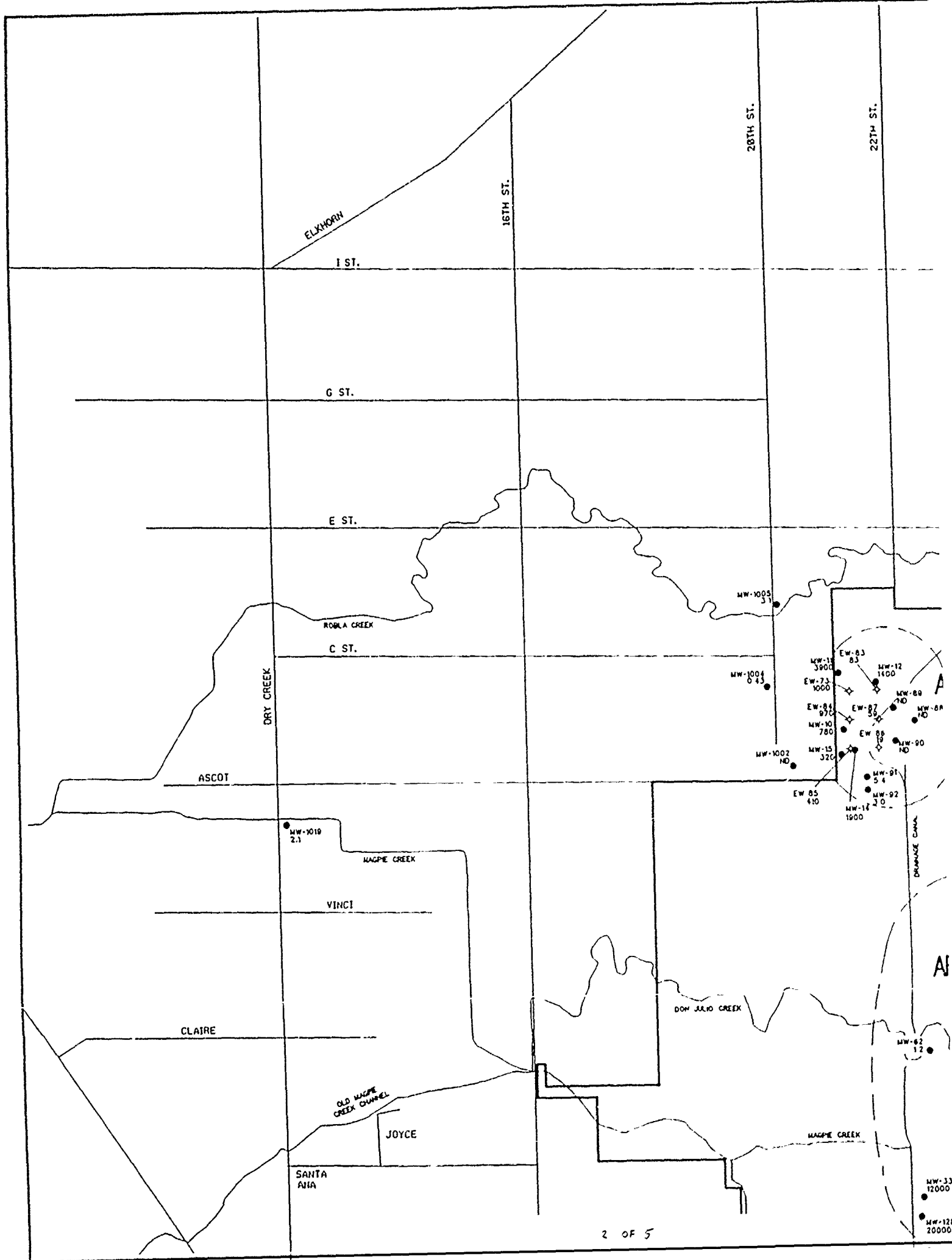


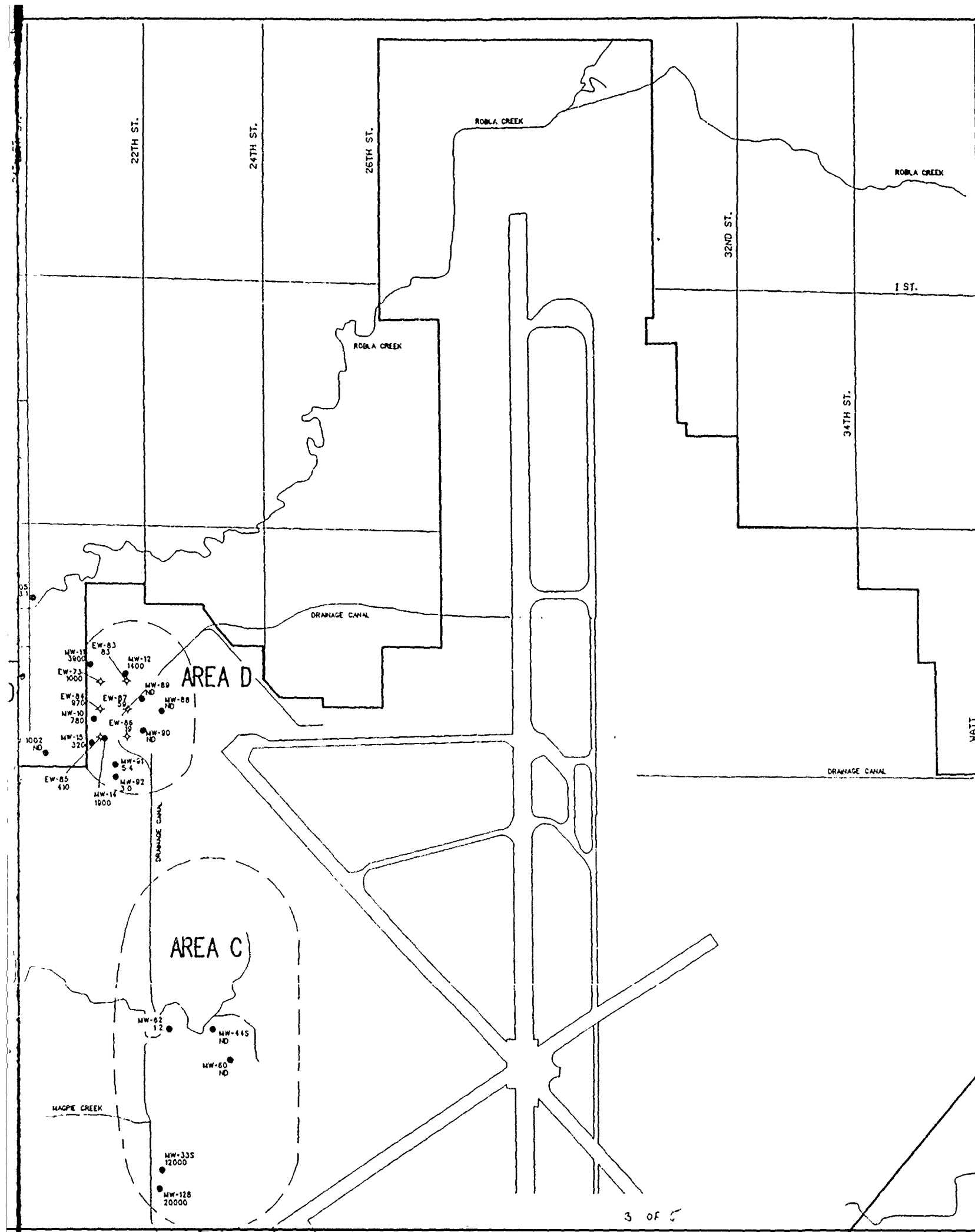
GENERATED BY: *Virginia Jewell* DATE: 8/7/90

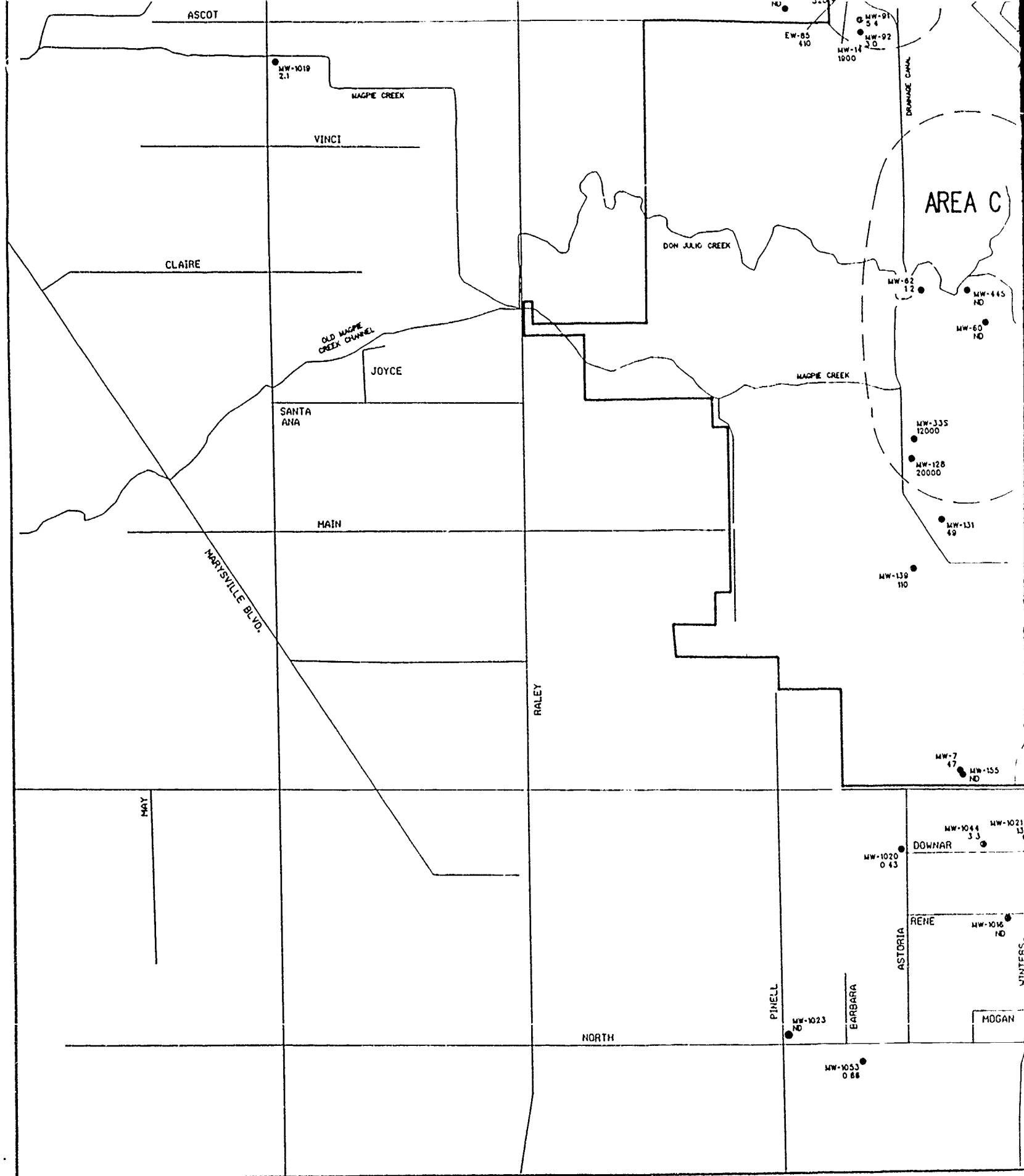
PEER REVIEW: *Deena Stanley* DATE: 8/8/90

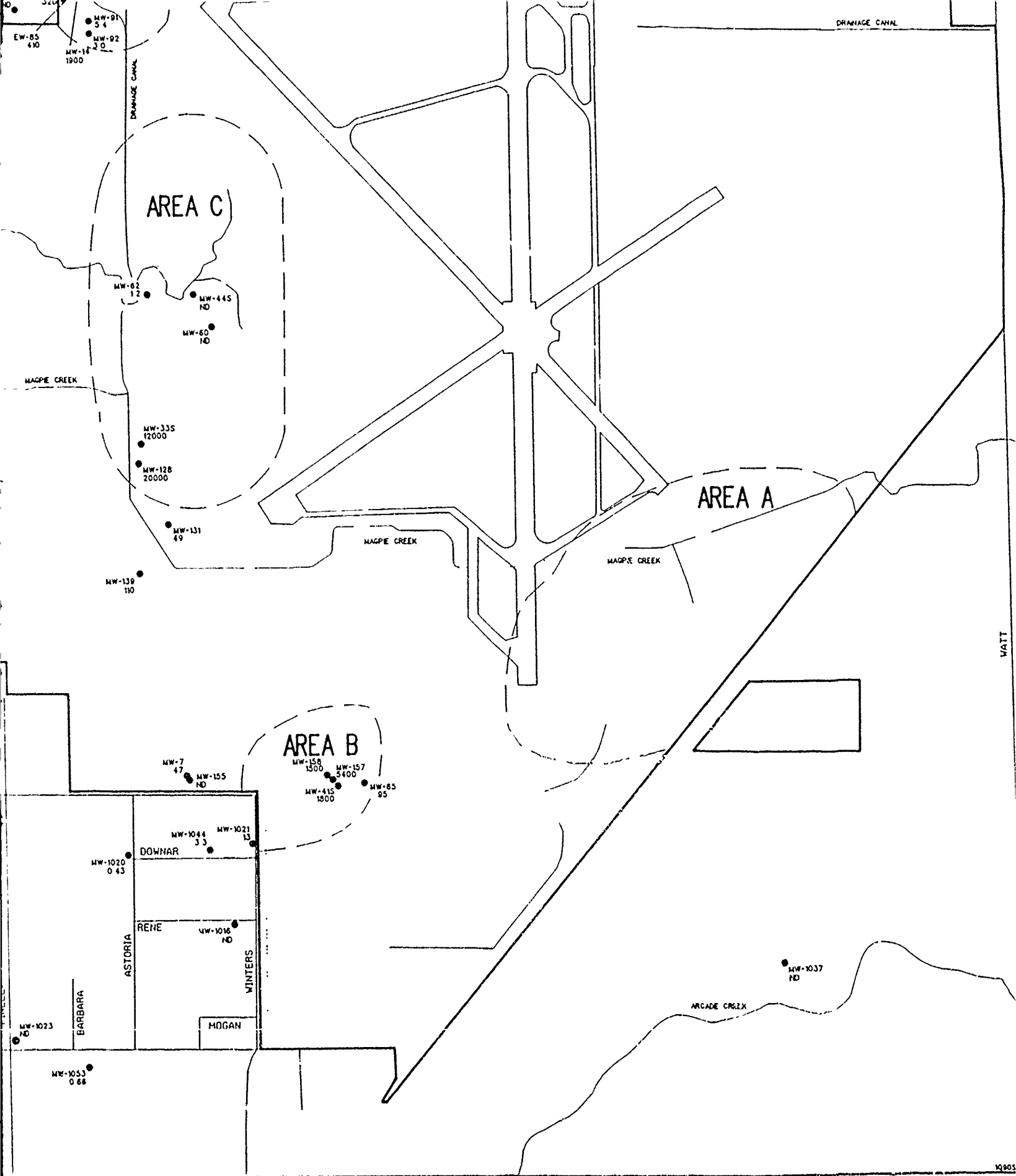
PROJECT REVIEW: *Lyle P. Thompson* DATE: 8/8/90

**RADIAN**  
CORPORATION









0.05

PLATE 9.

TCE Concentrations In the  
Middle Monitoring Zone  
(-55 to -100 Ft. MSL)

McClellan AFB  
Groundwater Sampling  
& Analysis Program

JANUARY-MARCH 1990  
Data Summary

LEGEND:

- McCLELLAN AFB BOUNDARY
- STREAMS/DRAINAGE (DOTTED WHERE COVERED)
- ◇ EXTRACTION WELLS
- MONITORING WELLS
- SS TCE CONCENTRATIONS IN ug/l
- ND TCE NOT DETECTED
- BOUNDARIES OF PAST DISPOSAL/STORAGE AREAS

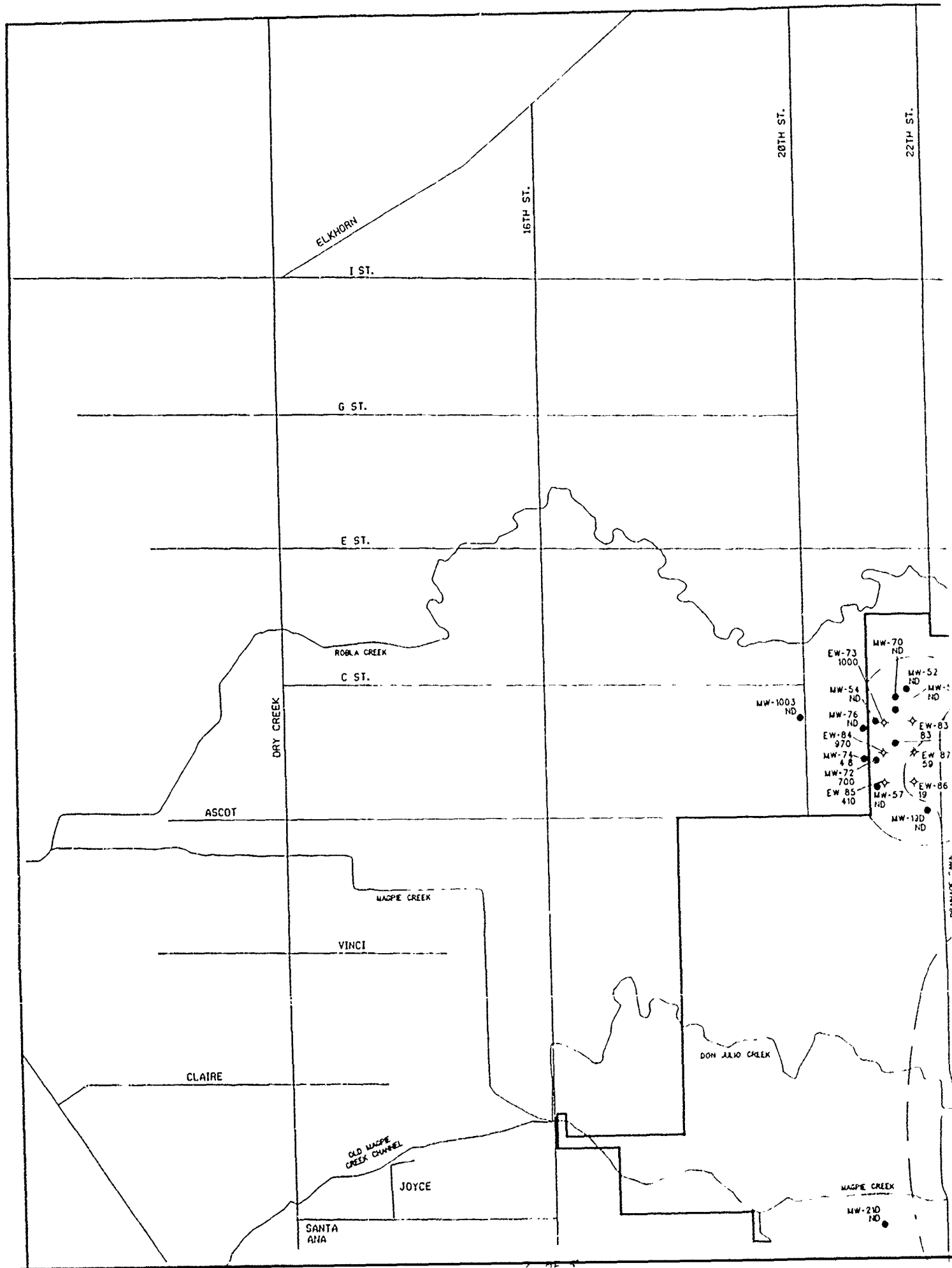
NOTE: AREA D EXTRACTION WELLS ARE SCREENED  
ACROSS THE SHALLOW AND MIDDLE ZONES

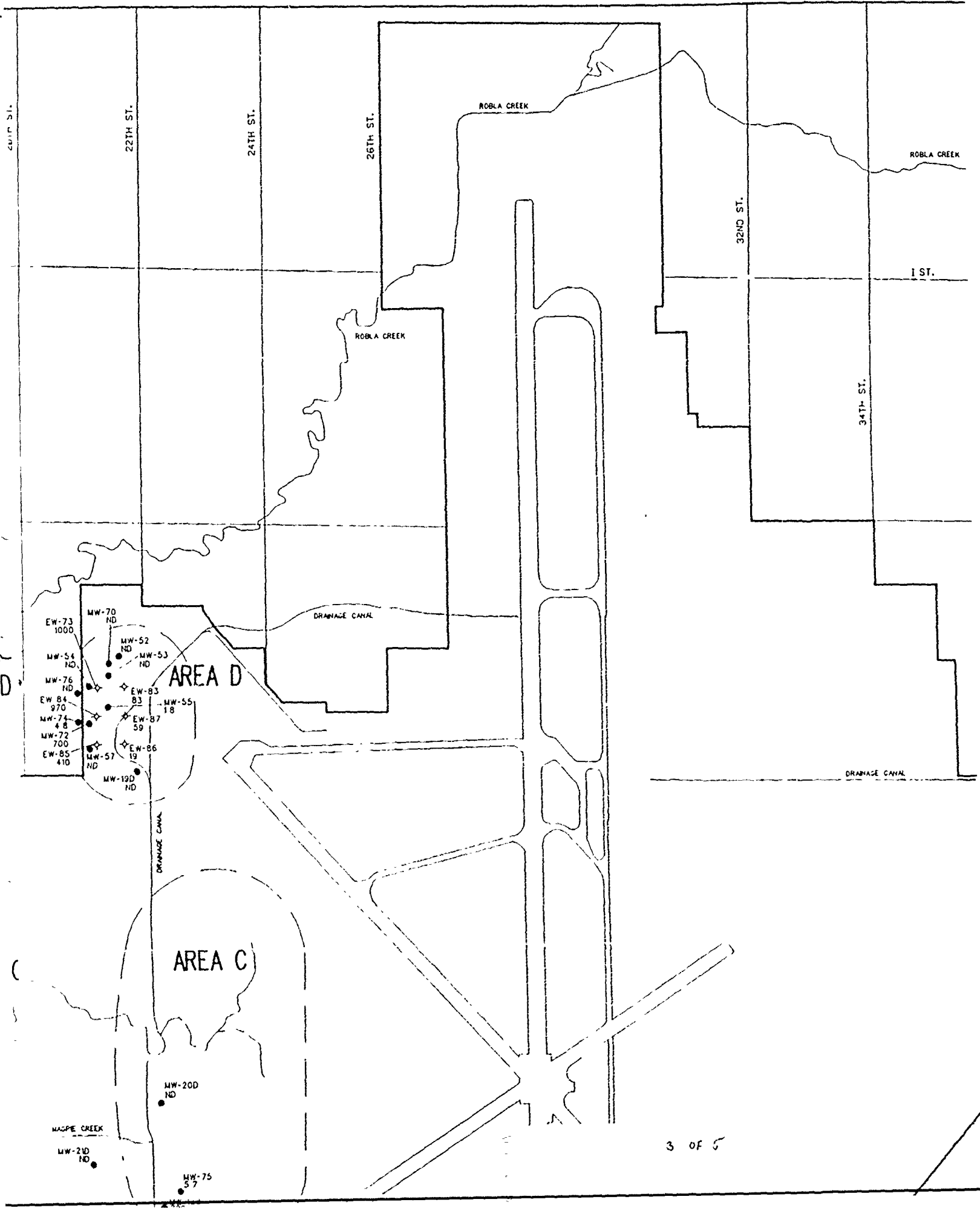
EW-144 IS SCREENED ACROSS THE MIDDLE  
AND DEEP "A" ZONE



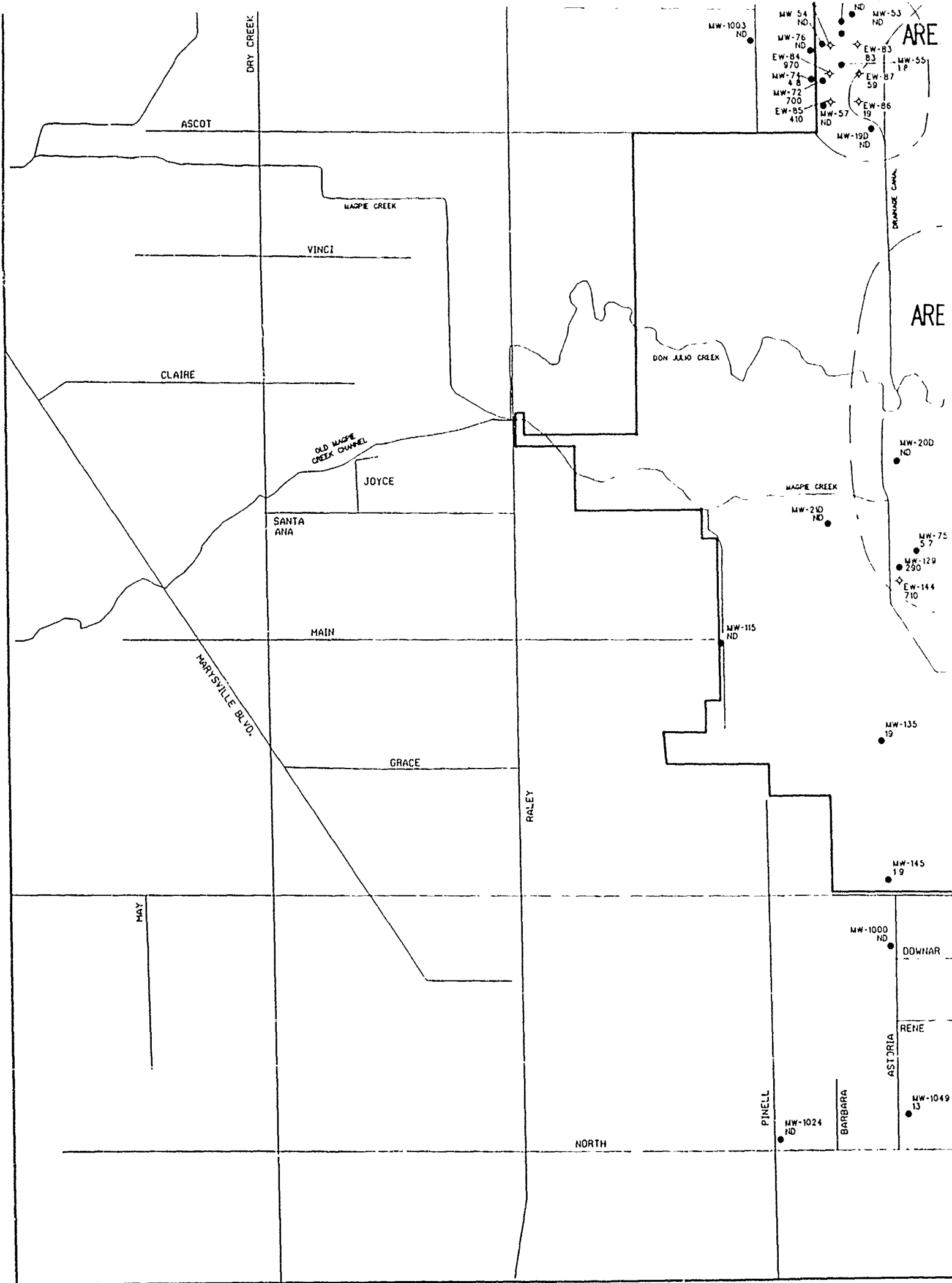
GENERATED BY: <i>Virginia Zewick</i>	DATE: 8/7/90
PEER REVIEW: <i>Debra A. Bailey</i>	DATE: 8/8/90
PROJECT REVIEW: <i>Jyle P. Hume</i>	DATE: 8/8/90

**RADIAN**  
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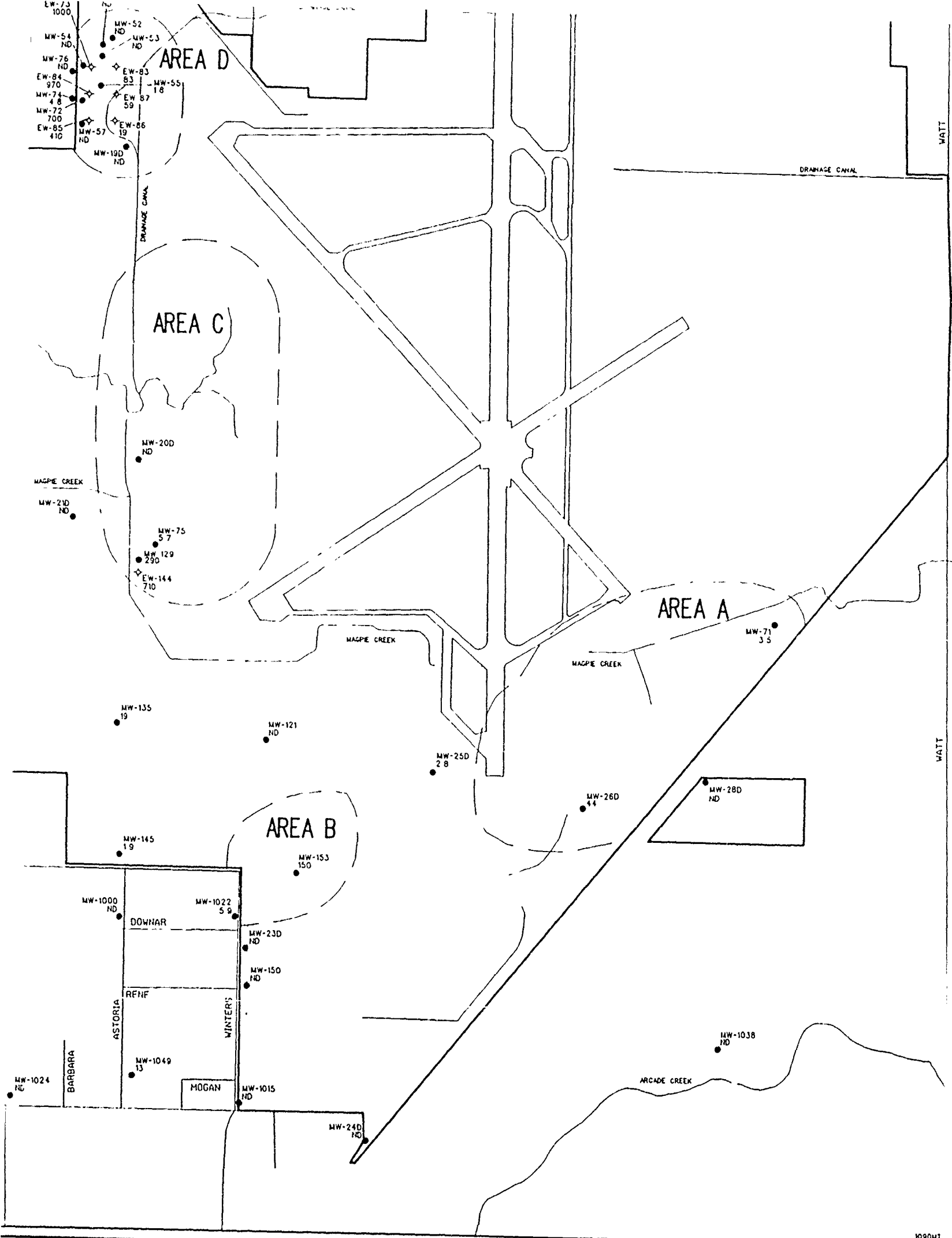


PLATE 10.

TCE Concentrations in the  
Deep "A" Monitoring Zone  
(-100 to -150 Ft. MSL)

McClellan AFB  
Groundwater Sampling  
& Analysis Program

JANUARY-MARCH 1990  
DATA SUMMARY

LEGEND:

- McCLELLAN AFB BOUNDARY
- - - - - STREAMS/DRAINAGE (DOTTED  
WHERE COVERED)
- ✧ EXTRACTION WELLS
- MONITORING WELLS
- 55 TCE CONCENTRATIONS IN ug/l
- ND TCE NOT DETECTED
- BOUNDARIES OF PAST DISPOSAL/  
STORAGE AREAS

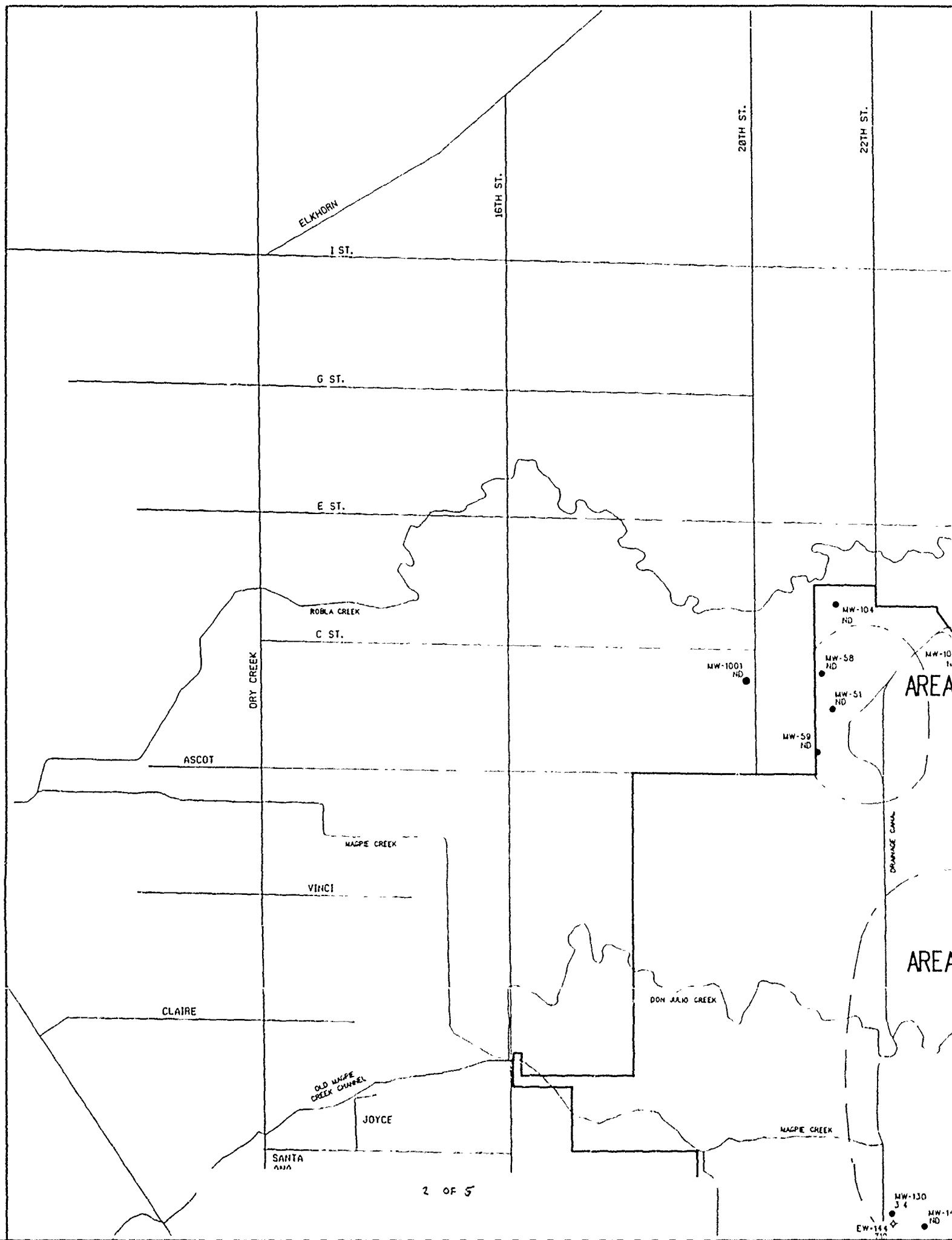
NOTE EW-144 IS SCREENED ACROSS THE MIDDLE  
AND DEEP "A" ZONE



0 1000  
SCALE IN FEET

GENERATED BY: *Virginia Lewis* DATE: 8/7/90  
PEER REVIEW: *Deena A. Stanley* DATE: 8/8/90  
PROJECT REVIEW: *J. P. Thompson* DATE: 8/8/90

**RADIAN**  
**CORPORATION**



22TH ST.

24TH ST.

26TH ST.

ROBLA CREEK

ROBLA CREEK

32ND ST.

1 ST.

34TH ST.

ROBLA CREEK

DRAINAGE CANAL

AREA D

DRAINAGE CANAL

AREA C

MW-59  
ND

MW-58  
ND

MW-51  
ND

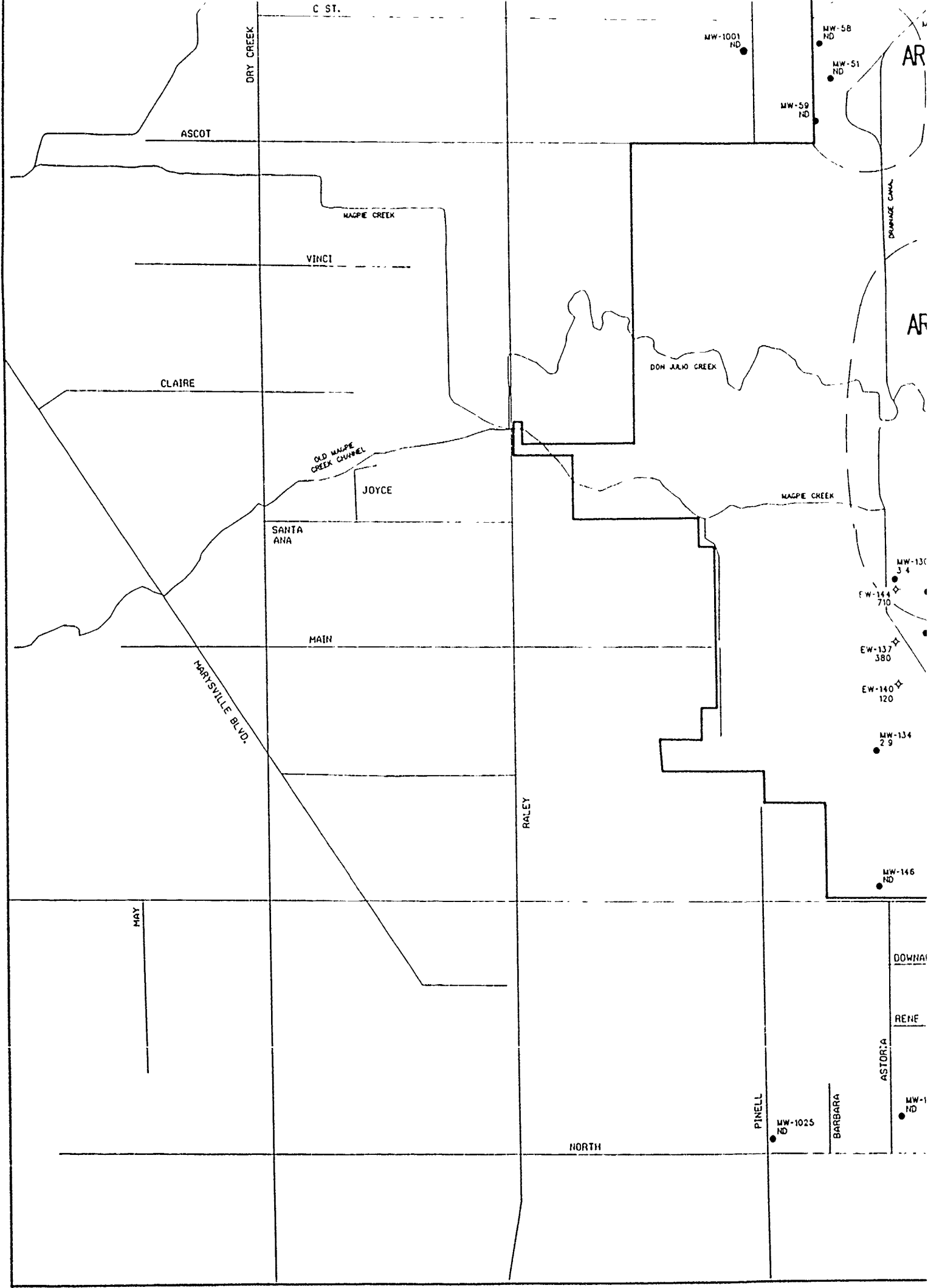
MW-104  
ND

MW-105  
ND

WASPE CREEK

MW-130  
34  
EW-144  
710

MW-143  
ND



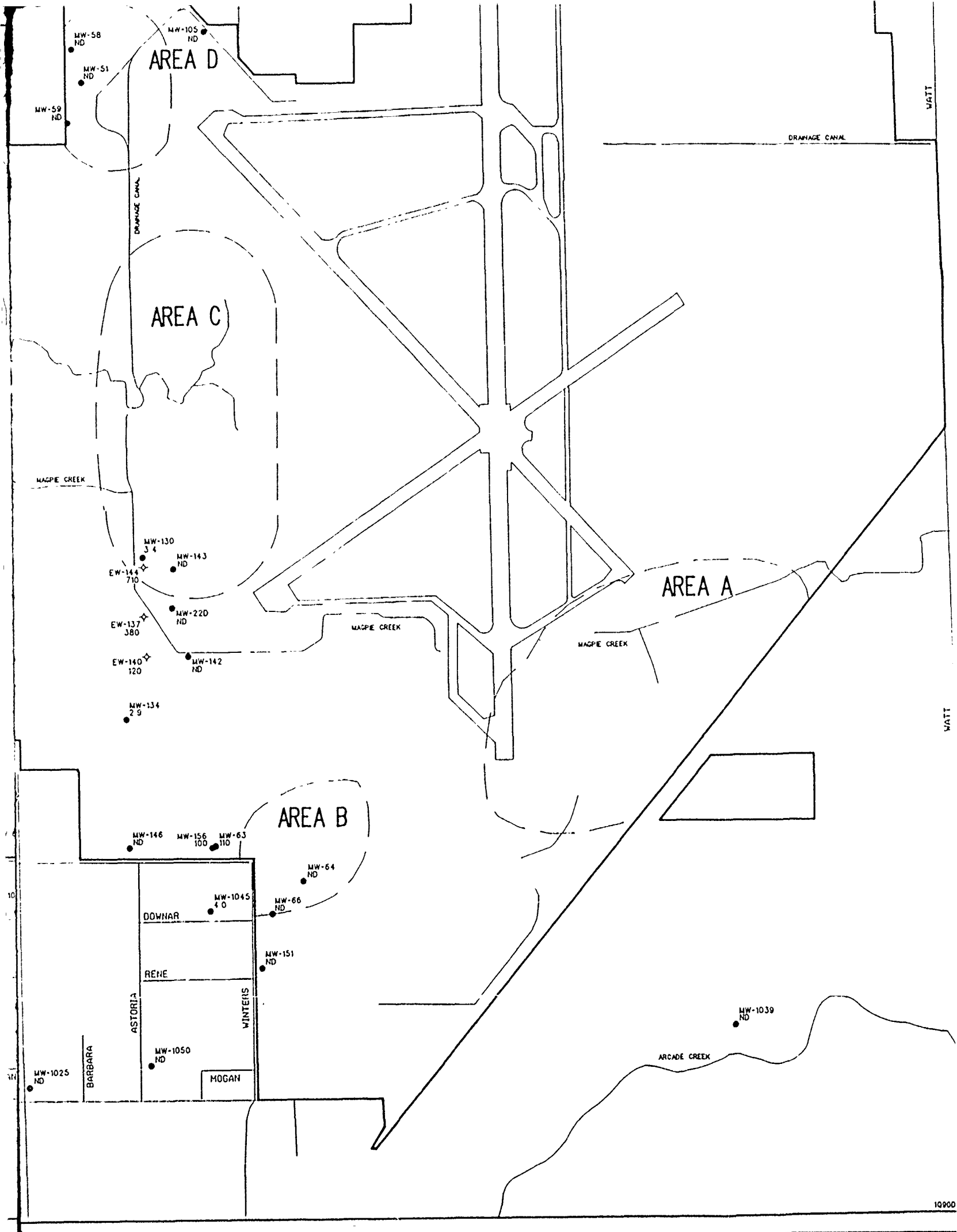


PLATE 11.

TCE Concentrations in the  
Deep "B" Monitoring Zone  
(Below -150 Ft. MSL)

McClellan AFB  
Groundwater Sampling  
& Analysis Program

JANUARY-MARCH 1990  
DATA SUMMARY

LEGEND:

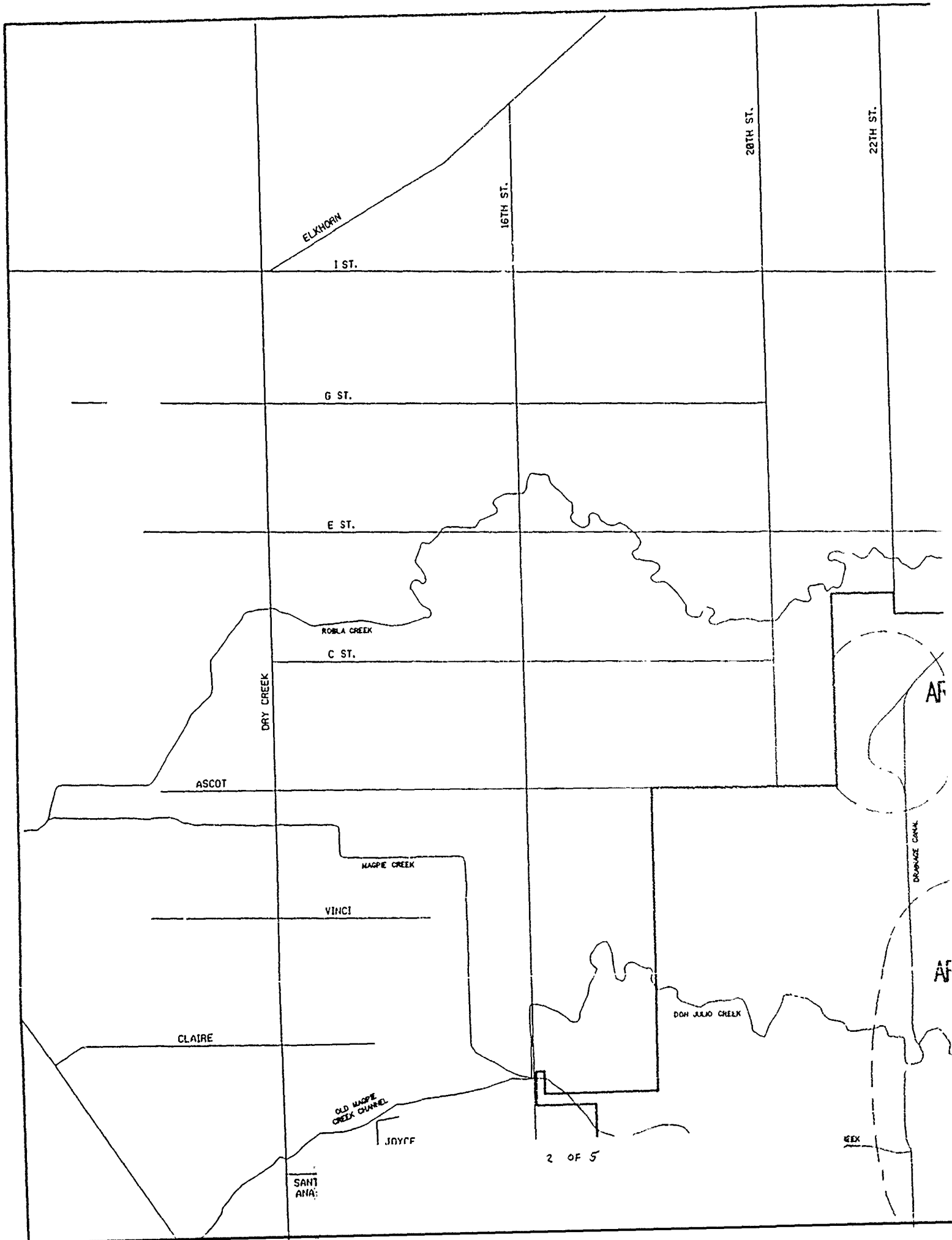
- McCLELLAN AFB BOUNDARY
- ..... STREAMS/DRAINAGE (DOTTED WHERE COVERED)
- ◇ EXTRACTION WELLS
- MONITORING WELLS
- 55 TCE CONCENTRATIONS IN ug/l
- ND TCE NOT DETECTED
- BOUNDARIES OF PAST DISPOSAL/STORAGE AREAS

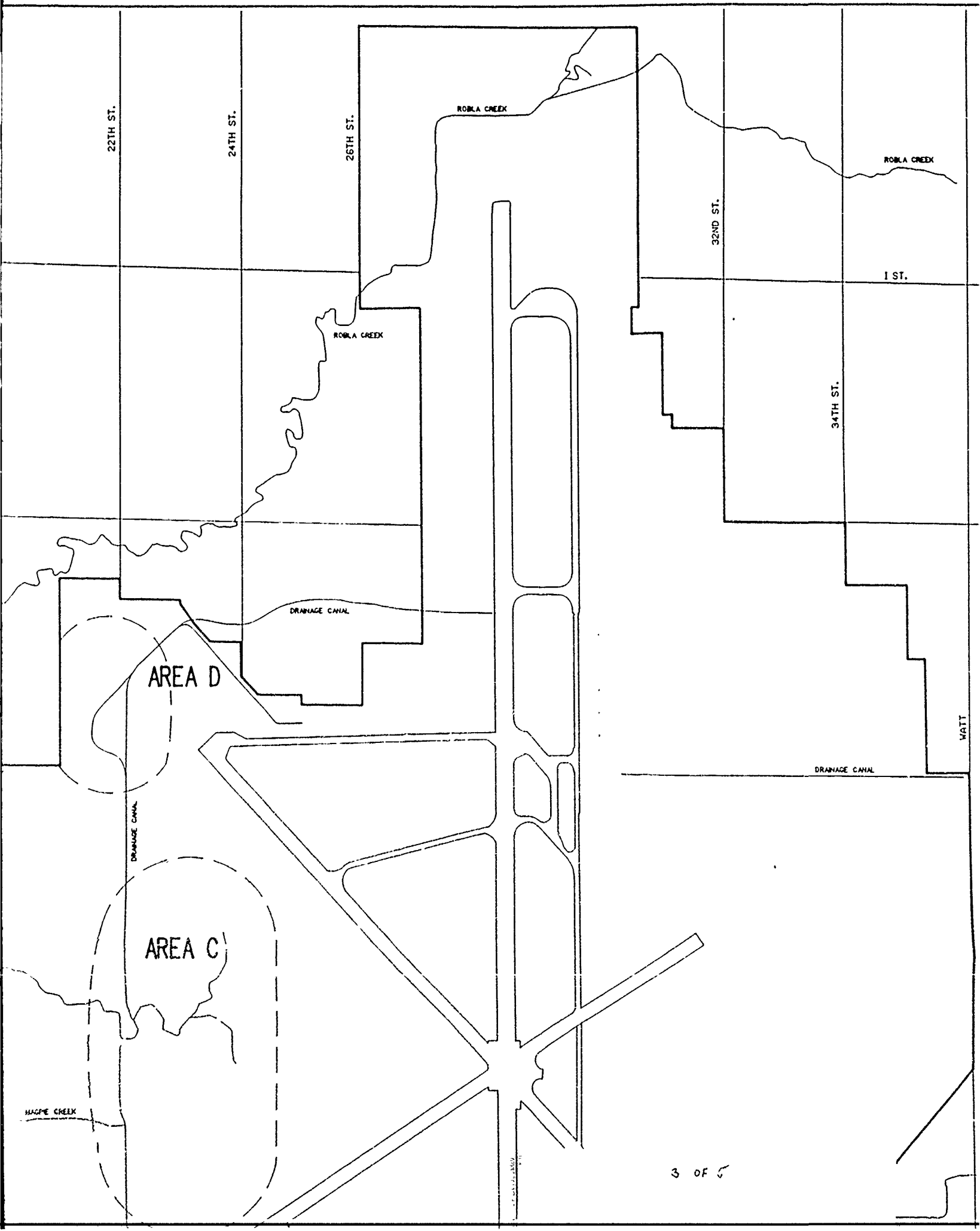


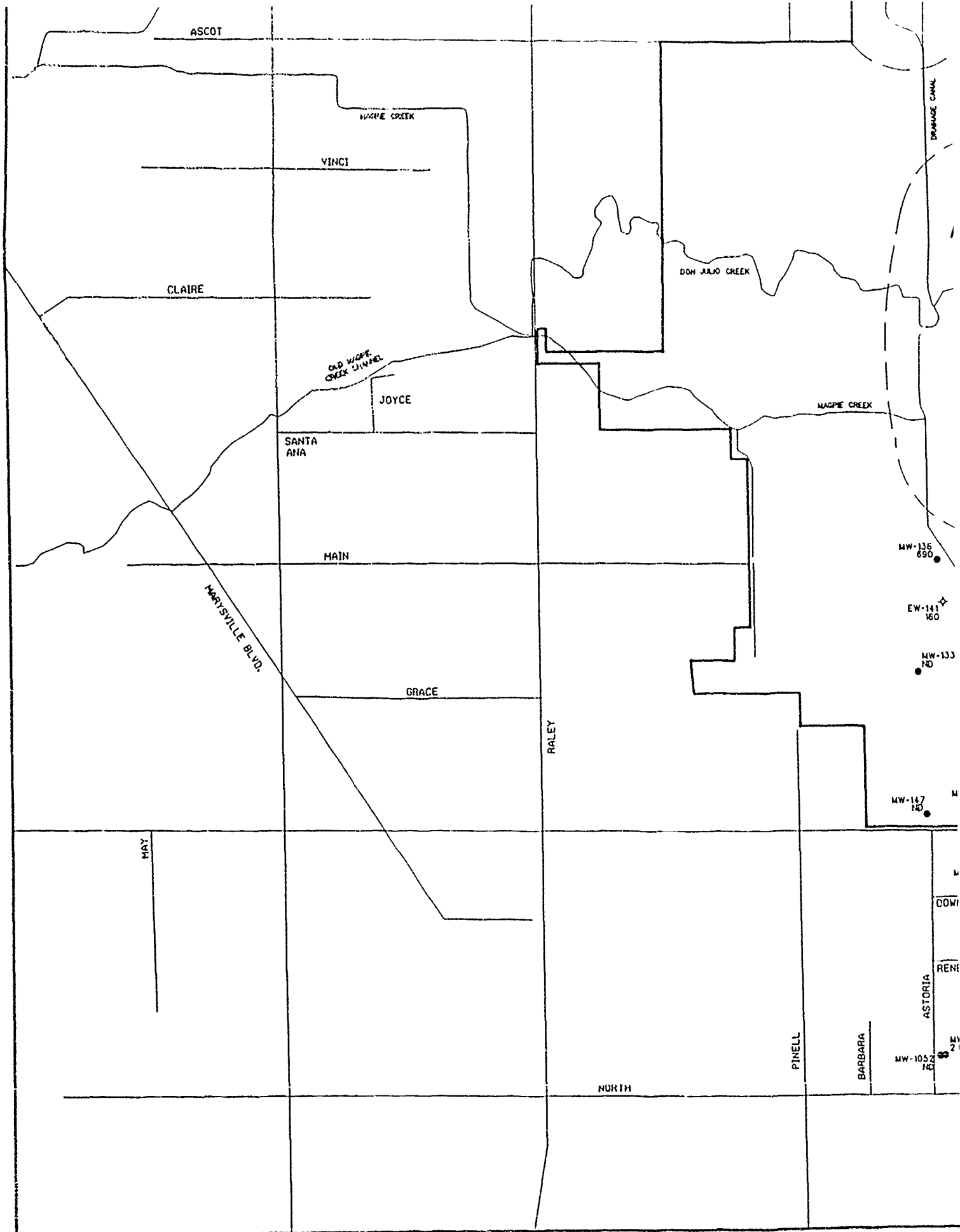
GENERATED BY: *Virginia K. Lewis* DATE: 8/7/90  
PEER REVIEW: *Dana O. Stenberg* DATE: 8/8/90  
PROJECT REVIEW: *Judy P. Thompson* DATE: 8/8/90

**RADIAN**  
CORPORATION









AREA C

AREA A

AREA B

MW-136  
890

MW-138  
ND

EW-141  
160

MW-133  
ND

MW-147  
ND

MW-149  
0.98

MW-148  
7.2

MW-132  
120

MW-154  
0.83

MW-1047  
ND

MW-1046  
20

DOWNAR

MW-1048  
ND

RENE

WINTERS

ASTORIA

MW-1052  
15

MW-1051  
2.0

MOGAN

PINELL

BARBARA

ARCADE CREEK